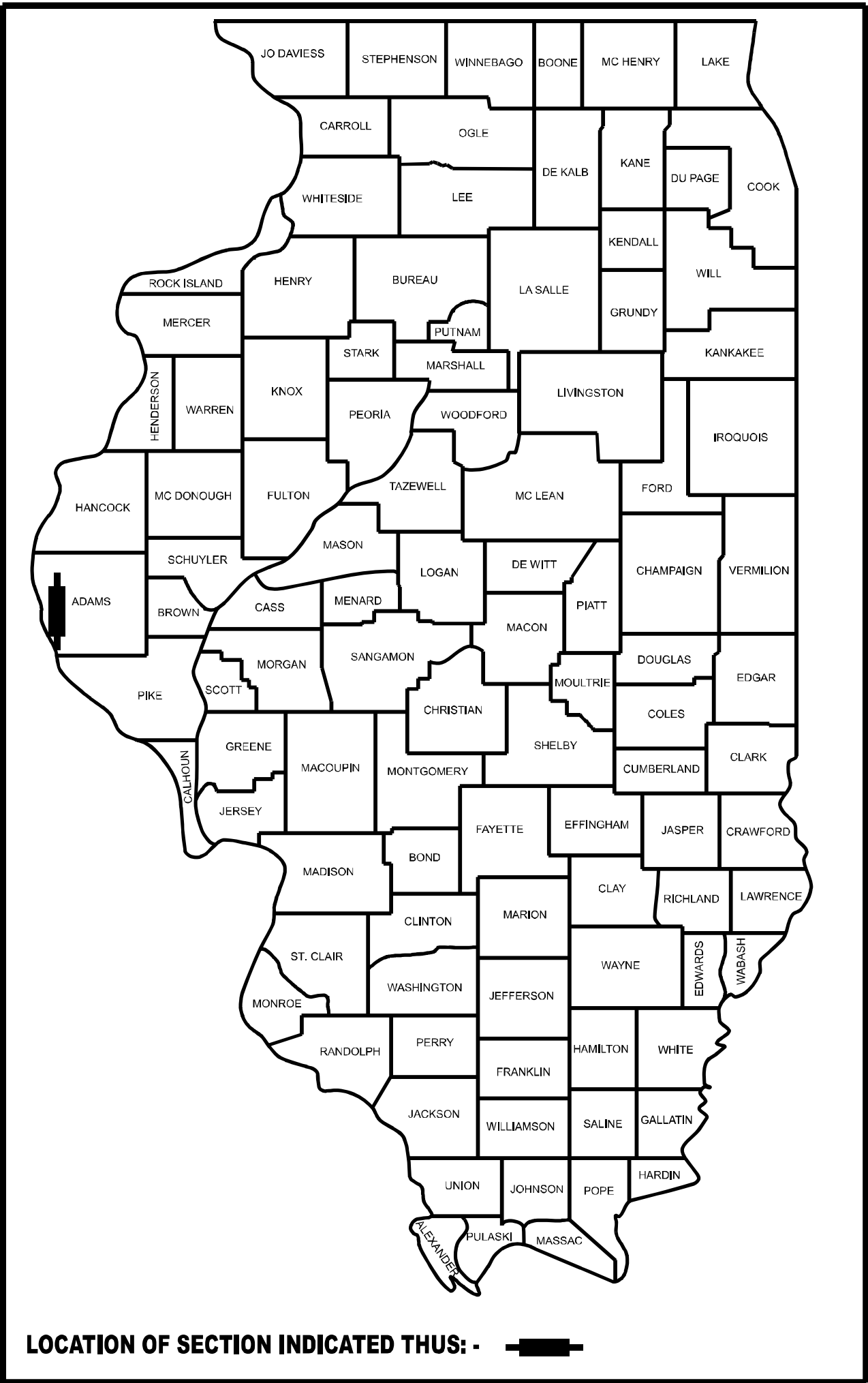


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	1
		ILLINOIS	CONTRACT NO. 72E90	

D-96-044-26

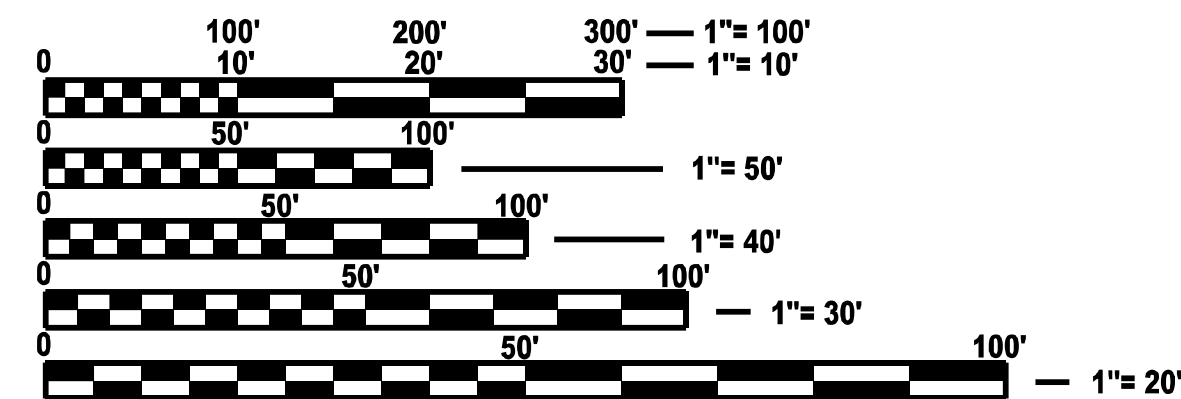


LOCATION OF SECTION INDICATED THUS: - [Symbol] -

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED
HIGHWAY PLANS

FAI ROUTE 172 (I-172)
SECTION D6 BP 2027
PROJECT NHPP-Q9AF(146)
BRIDGE PAINTING
ADAMS COUNTY
C-96-082-26

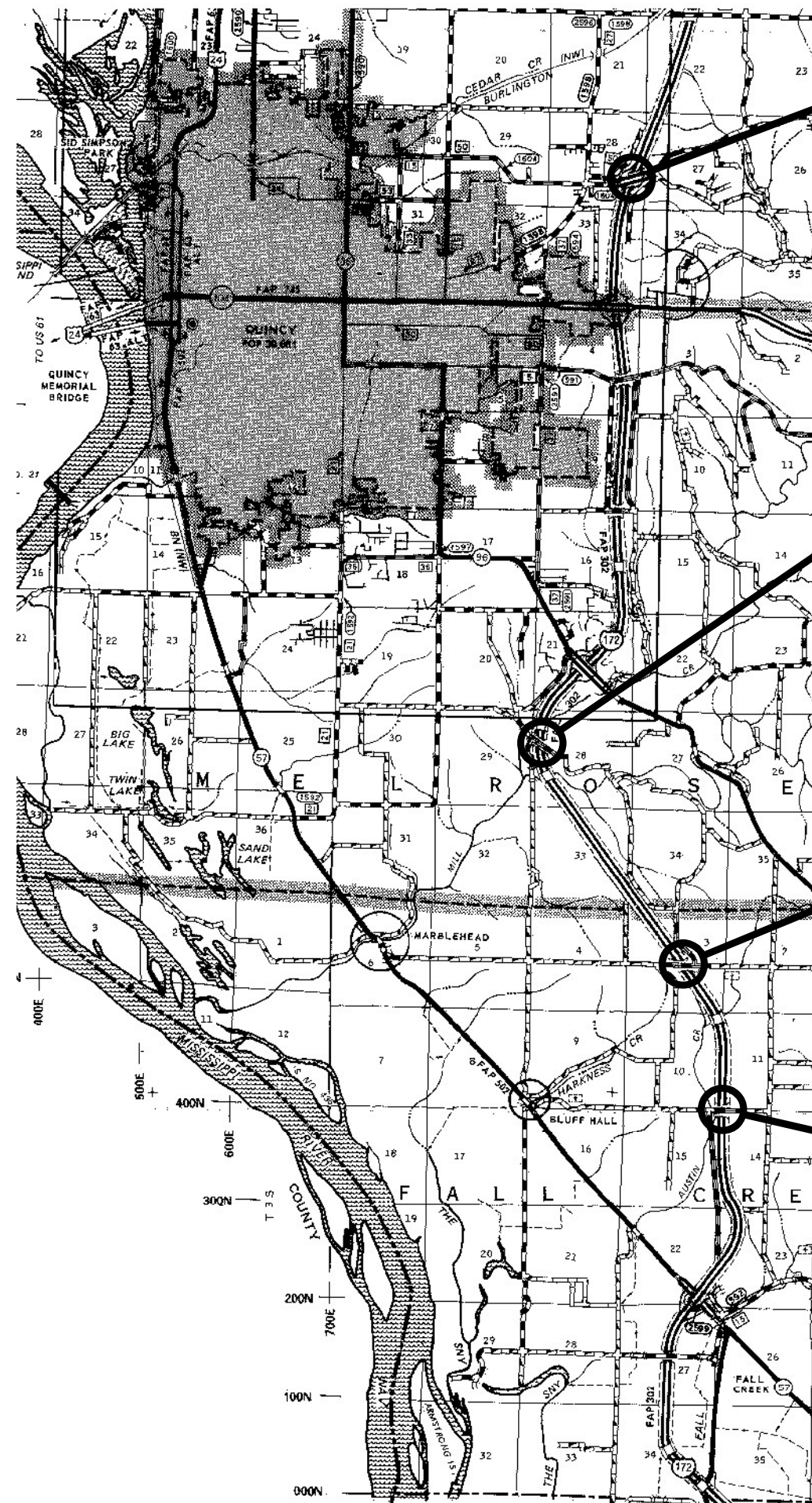


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: BRANDON DUDLEY - (217) 785-9290
PROJECT MANAGER

CONTRACT NO. 72E90



LOCATION #4:
SN 001-0048
COLUMBUS RD OVER I-172
1.3 MI N IL 104

LOCATION #3:
SN 001-0061
TR 114A OVER I-172
1 MI S IL 96

LOCATION #2:
SN 001-0060
TR 531A OVER I-172
3.6 MI N IL 57

LOCATION #1:
SN 001-0058
TR 551 OVER I-172
2.1 MI N IL 57

GROSS LENGTH = x.xx FT. = x.xxx MILE
NET LENGTH = x.xx FT. = x.xxx MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 13, 2026
Teresa C. Price
REGIONAL ENGINEER
October 2, 2026
See E.A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT
October 2, 2026
Harry
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1COVER SHEET
- 2INDEX, STANDARDS, GENERAL NOTES, & SIGNATURES
- 3-4SUMMARY OF QUANTITIES
- 5-7EXISTING BRIDGE PLANS, SN 001-0058
- 8-13EXISTING BRIDGE PLANS, SN 001-0060
- 14-18EXISTING BRIDGE PLANS, SN 001-0061
- 19-22EXISTING BRIDGE PLANS, SN 001-0048

HIGHWAY STANDARDS

- 000001-09
- 001006
- 701101-05
- 701106-02
- 701400-12
- 701402-12
- 701411-09
- 701901-11
- 704001-08

GENERAL NOTES:

1. WORK SHALL CONSIST OF BLASTING AND PAINTING STRUCTURAL STEEL AT LOCATIONS DESCRIBED IN THE SPECIAL PROVISIONS. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL AREAS TO BE PAINTED SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING PER SSPC SP 10. ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COATS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISIONS.
2. THE USE OF AIR MONITORS WILL BE REQUIRED AT LOCATIONS AS CALLED OUT IN THE SPECIAL PROVISIONS.
3. THE SSPC-QP-1 AND SSPC-QP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED.
4. CARE SHALL BE TAKEN NOT TO DAMAGE RUBBER BEARING OR JOINT COMPONENTS DURING BLASTING AND CLEANING OPERATIONS. ANY DAMAGE TO THESE COMPONENTS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. RUBBER COMPONENTS SHALL NOT BE PAINTED.
5. UPON COMPLETION OF PAINTING OPERATIONS, THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM PIER OR ABUTMENT CAPS UPON WHICH PAINTING OPERATIONS TOOK PLACE. FINAL CLEANUP SHALL BE CONSIDERED INCIDENTAL TO THE PAINT PAY ITEM FOR THE RESPECTIVE LOCATION. THE ENGINEER SHALL HAVE THE RIGHT TO WITHOLD PAYMENT UNTIL SATISFACTORY CLEANUP IS ACHIEVED.

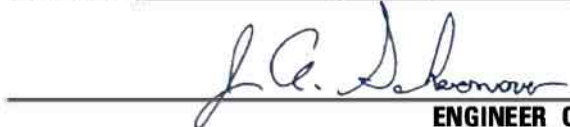
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINED

August 7,

20

26



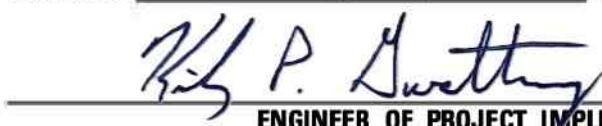
ENGINEER OF OPERATIONS

EXAMINED

August 6,

20

26



ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED

August 12,

20

26



ENGINEER OF PROGRAM DEVELOPMENT

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			DRAWN	-	REVISED	-				172	D6 BP 2027	ADAMS	22	2
			CHECKED	-	REVISED	-				CONTRACT NO. 72E90				
	PLOT DATE	= 5/14/2026	DATE	-	REVISED	-				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 1		OF	1	SHEETS	STA.	TO STA.						

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0-01380-6002	0-01380-6002	0-01380-6002	0-01380-6002
				NHPP 90/10	NHPP 90/10	NHPP 90/10	NHPP 90/10
				SN 001-0058	SN 001-0060	SN 001-0061	SN 001-0048
				0047-RURAL	0047-RURAL	0047-URBAN	0047-URBAN
				ADAMS	ADAMS	ADAMS	ADAMS
67100100	MOBILIZATION	L SUM	1	0.25	0.25	0.25	0.25
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	8	2	2	2	2
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2	0	0	0	2
70107025	CHANGEABLE MESSAGE SIGNS	CAL DA	14	14	0	0	0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2400	600	600	600	600
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2400	600	600	600	600
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	8	2	2	2	2
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	8	2	2	2	2

MODEL: SOQ-2 [Sheet]
FILE NAME: c:\pw_work\pwid\ddudley\mtd123125172E90_plansheet.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0-01380-6002	0-01380-6002	0-01380-6002	0-01380-6002
				NHPP 90/10	NHPP 90/10	NHPP 90/10	NHPP 90/10
				SN 001-0058	SN 001-0060	SN 001-0061	SN 001-0048
				0047-RURAL	0047-RURAL	0047-URBAN	0047-URBAN
				ADAMS	ADAMS	ADAMS	ADAMS
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	0	0	0
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1	0	1	0	0
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1	0	0	1	0
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1	0	0	0	1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	0	0	0
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1	0	1	0	0
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1	0	0	1	0
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1	0	0	0	1
Ø Z0076600	TRAINEES	hour	500	500			
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	hour	500	500			

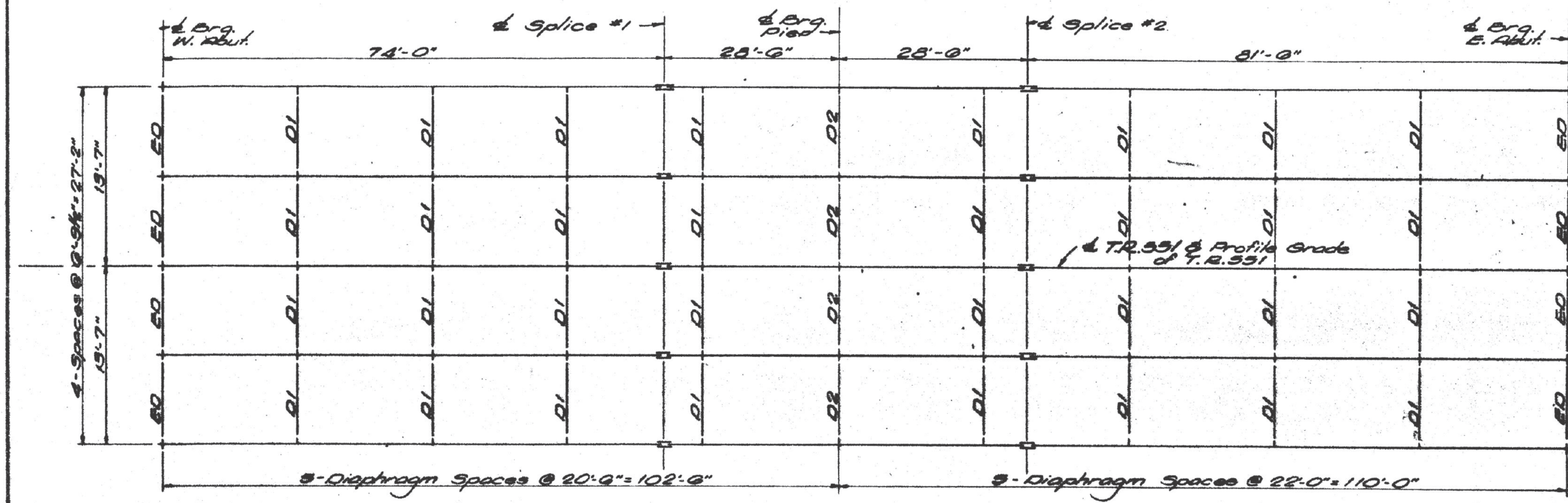
Ø 0042

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		CHECKED -	REVISED -							CONTRACT NO. 72E90				
	PLOT DATE = 5/14/2026	DATE -	REVISED -		SCALE:	SHEET 2	OF 2	SHEETS	STA.	TO STA.				
									ILLINOIS		FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

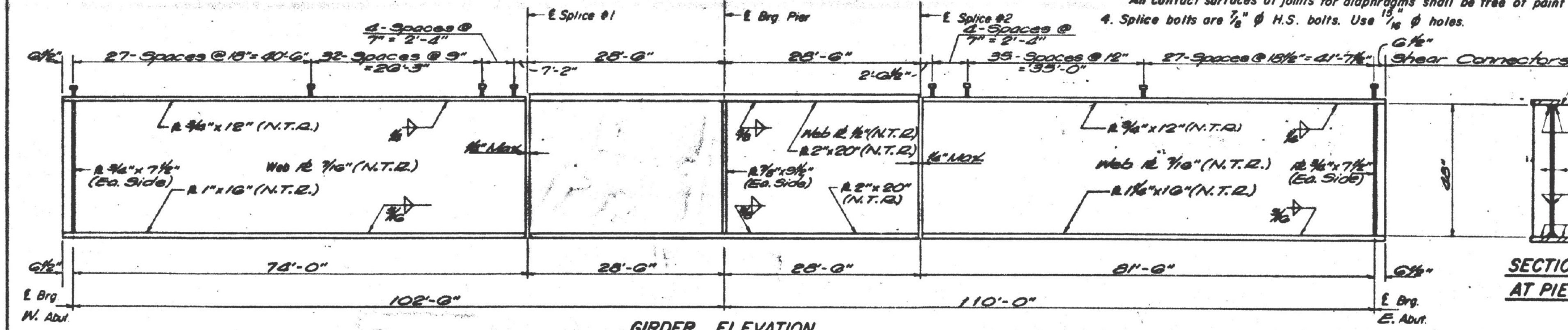
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-3HB-1, 1-3B-1	408	ADAMS	88	31

SHEET NO. 6
SHEETS 10

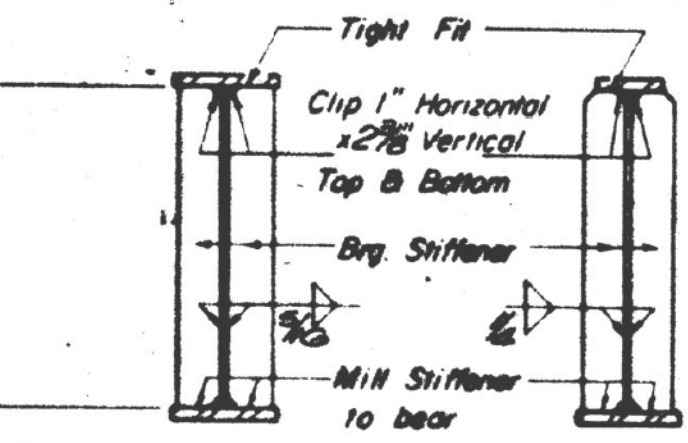


FRAMING PLAN

- NOTES
1. N.T.R. indicates Notch Toughness Requirements. See General Notes.
 2. Use $\frac{3}{4}$ " ϕ H.S. bolts for all diaphragm connections.
 3. Use oversize holes for diaphragm connections as follows:
ED & D2 - $1\frac{1}{16}$ " ϕ holes in gusset plates and bearing stiffeners.
D1 - $\frac{1}{16}$ " ϕ holes in angles and girder webs.
Hardened washers shall be provided under bolt head and nut.
All contact surfaces of joints for diaphragms shall be free of paint or lacquer.
 4. Splice bolts are $\frac{7}{8}$ " ϕ H.S. bolts. Use $\frac{1}{8}$ " ϕ holes.

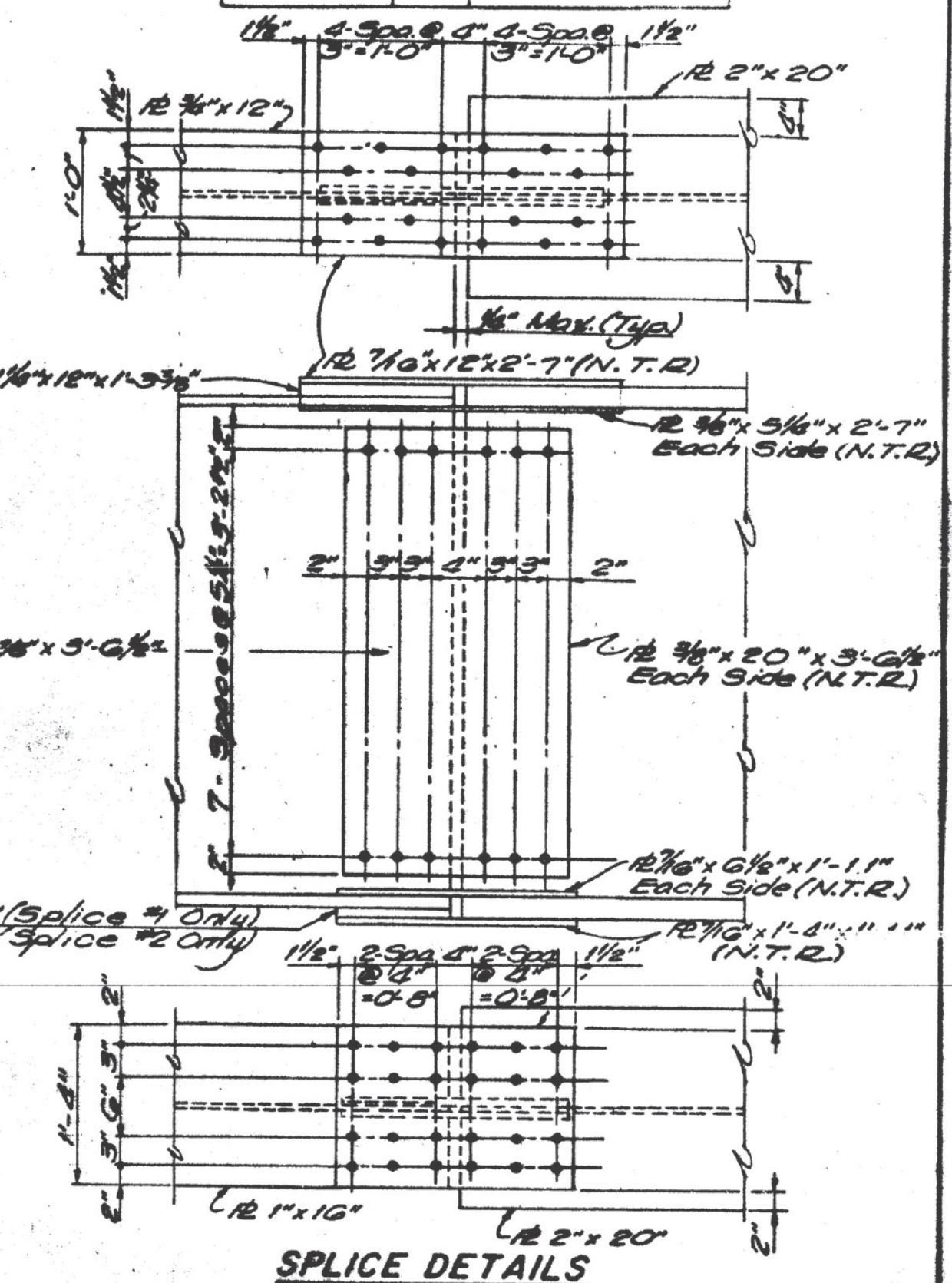


GIRDER ELEVATION

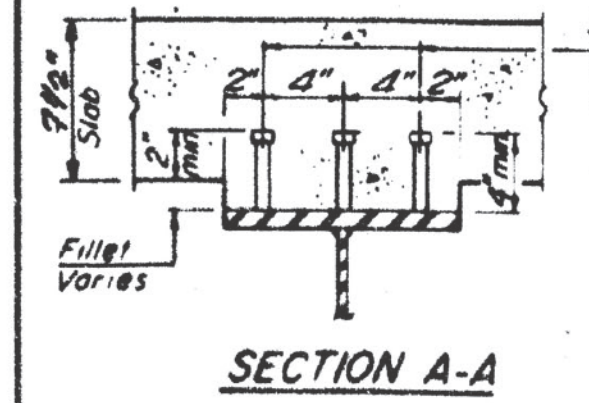


SECTION AT PIER

SECTION AT ABUTMENT



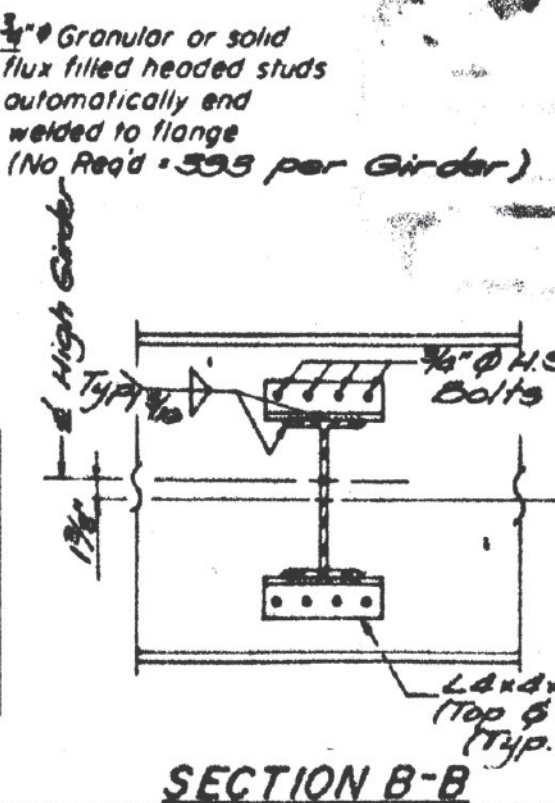
SPLICE DETAILS



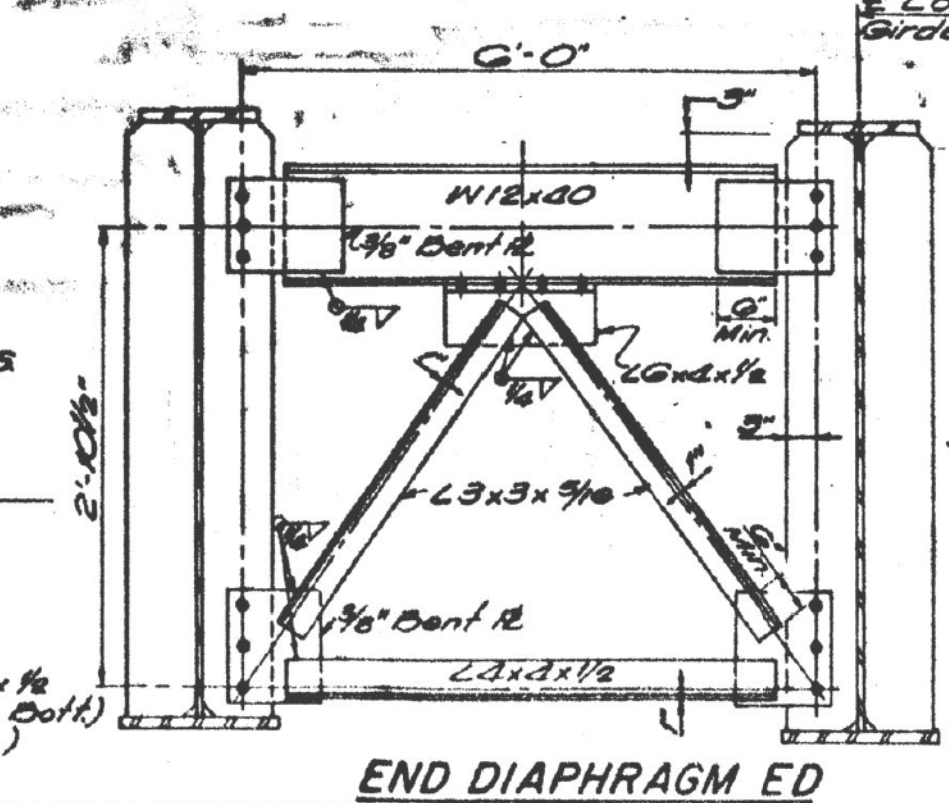
SECTION A-A

DESIGNED	SLM
CHECKED	MVM
DRAWN	RQY
CHECKED	SLM

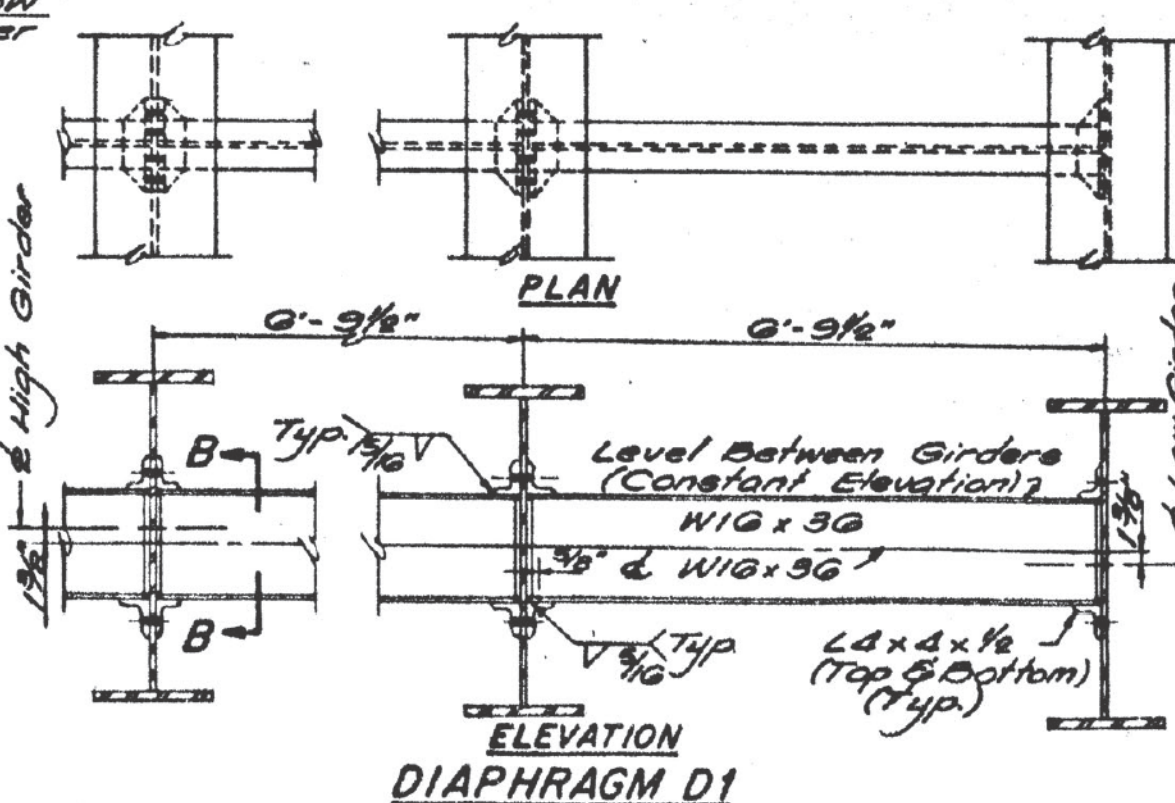
G-1 6/1/79



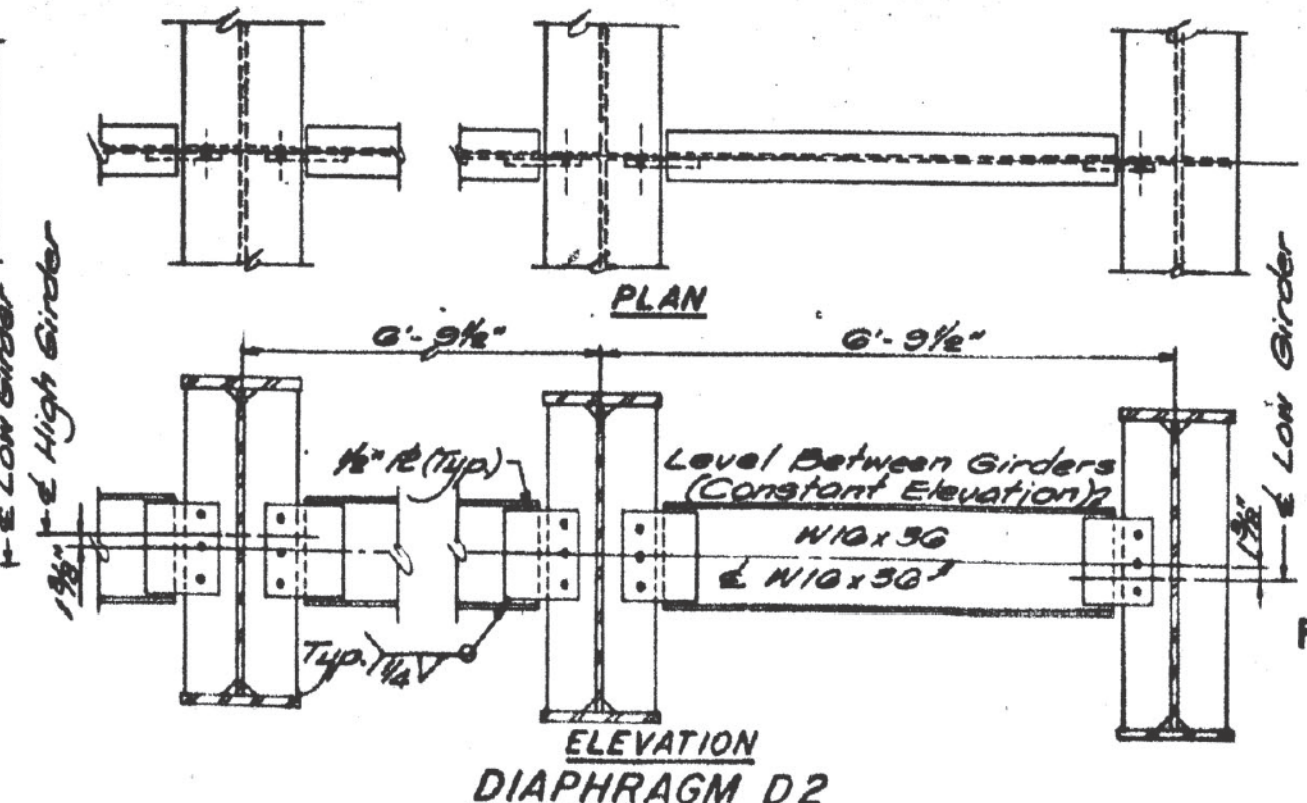
SECTION B-B



END DIAPHRAGM ED



DIAPHRAGM D1



DIAPHRAGM D2

STRUCTURAL STEEL
F.A. RTE. 408 SEC. 1-3HB-1
ADAMS COUNTY
STA. 231+05.30 F.A. 408

MODEL: bridge-2 (Sheet)
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USER NAME	brandon.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/14/2026	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0058
(FOR INFORMATION ONLY)

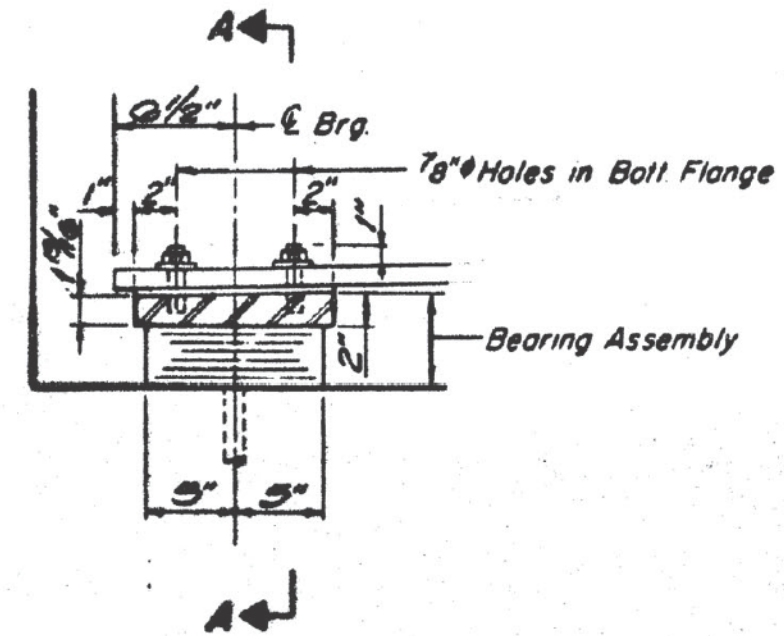
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	6

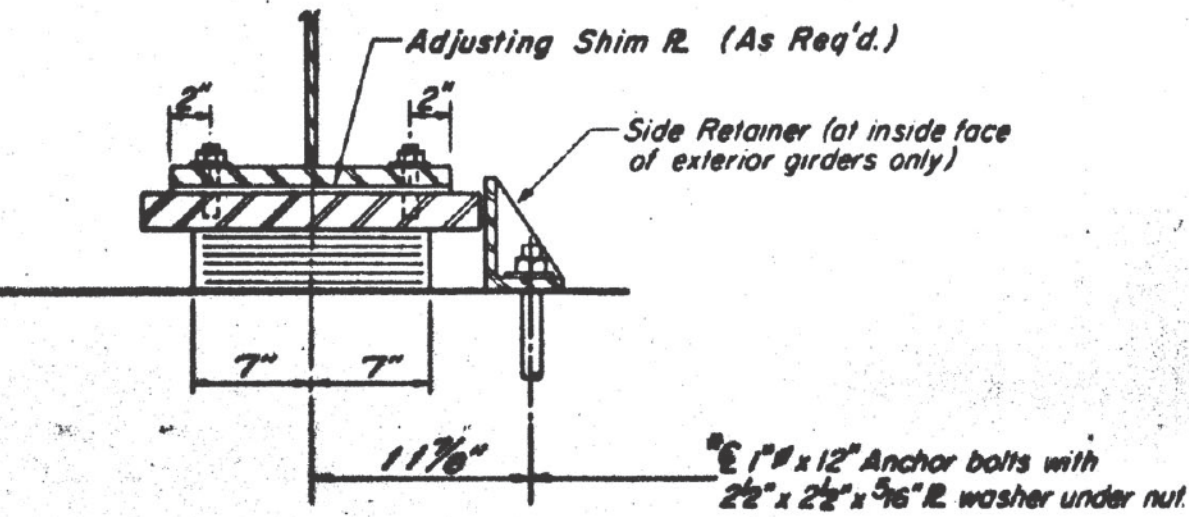
CONTRACT NO. 72E90
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

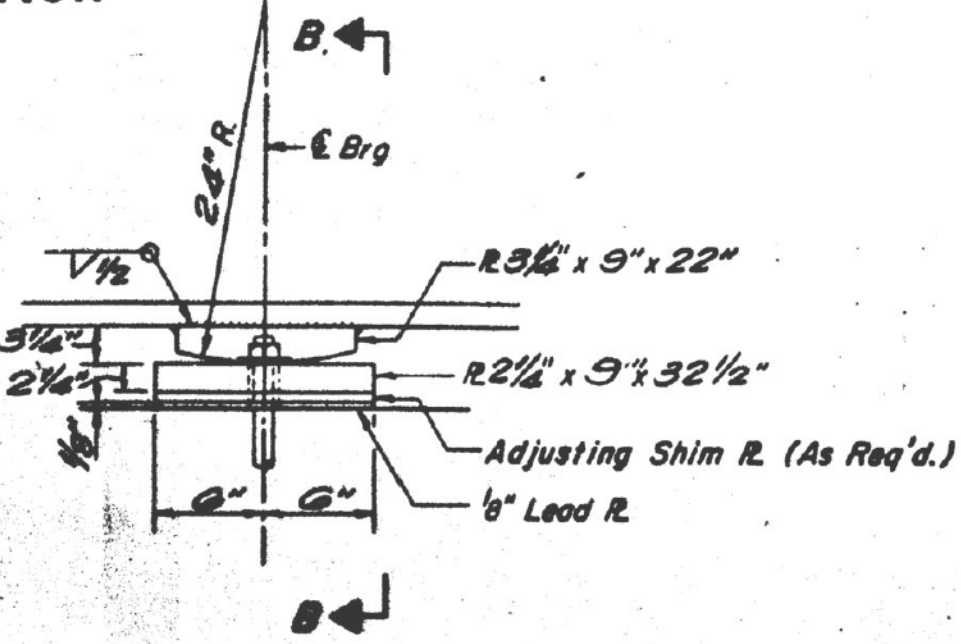
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
408	ADAMS	88	32	
1-3HB-1 & 1-3B-1				



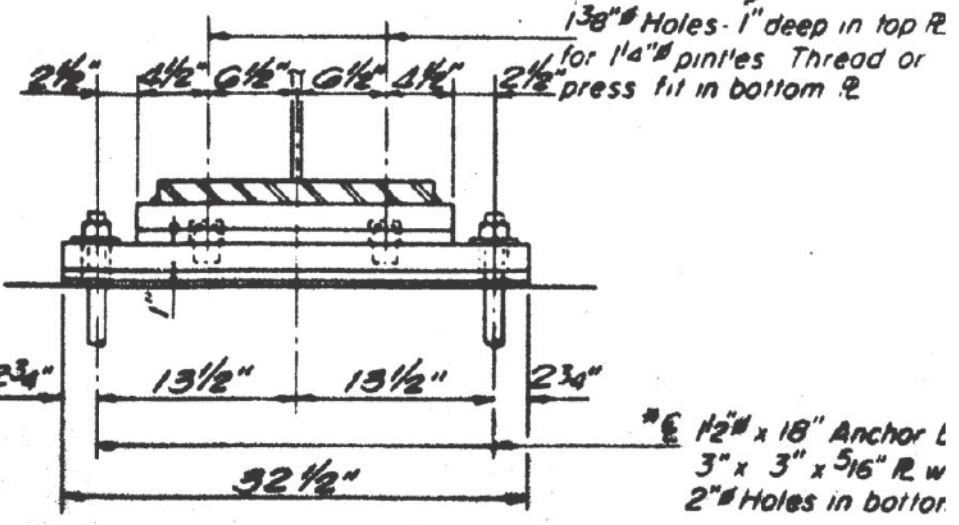
SECTION AT WEST ABUT.



SECTION A-A

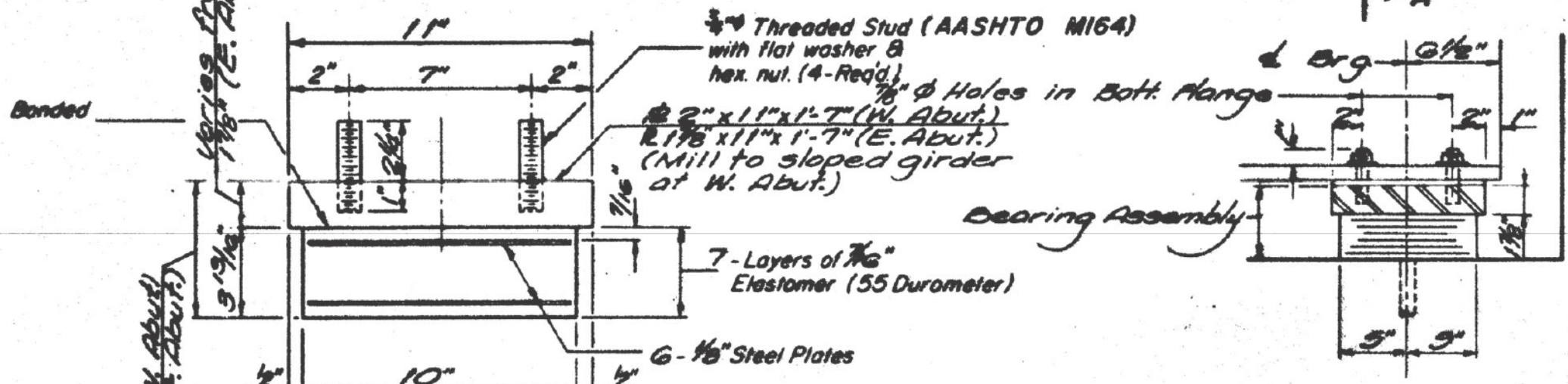


ELEVATION AT PIER

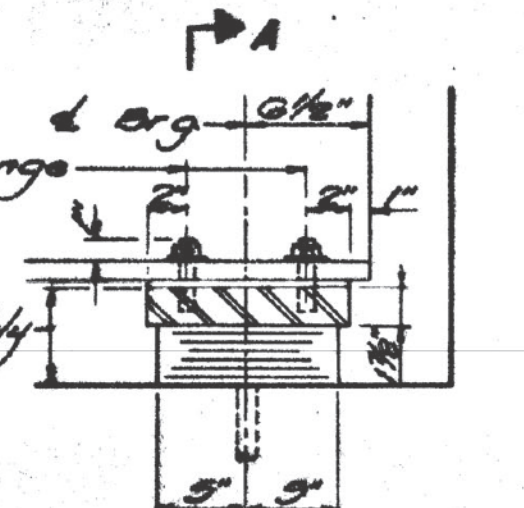


SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

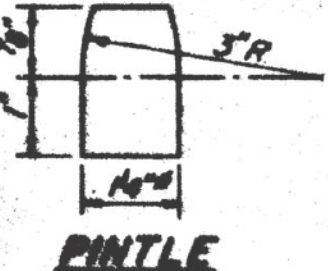


BEARING ASSEMBLY

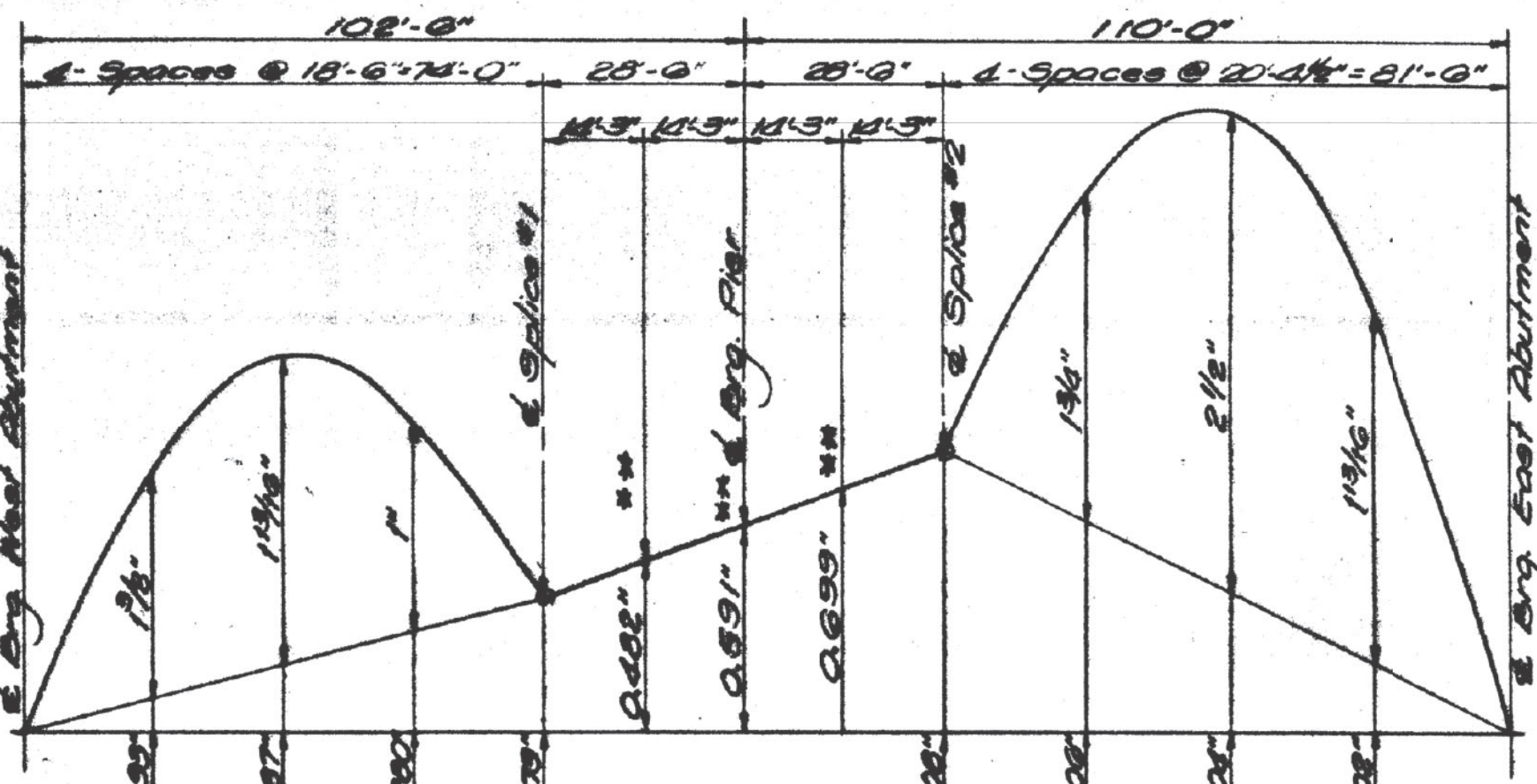


SECTION AT EAST ABUT.

Note: After girders have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



PINPLE



CAMBER DIAGRAM
**No Camber Req'd.

MOMENT & SHEAR TAB		
	0.4 SPAN I	PIER
I _s (in. ⁴)	8,337.21	54,632.6
S _{xx} (in. ³)	863.08	2,101.3
DL (ft-k)	0.861	1.058
MDL (ft-k)	253.10	-1715.3
f _{xx} DL (ksi)	6.02	9.80
I _c (in. ⁴)	53,386.77	54,632.6
S _{cy} (in. ³)	1,068.51	2,101.3
SDL (ft-k)	0.313	0.313
MSDL (ft-k)	159.6	-505.6
f _{xx} SDL (ksi)	1.79	2.89
I _c (in. ⁴)	86,668.07	54,632.6
S _{cy} (in. ³)	1,068.82	2,101.3
MLL (ft-k)	776.75	-808.13
NIMP (ft-k)	170.72	-174.73
MLL TOTAL (ft-k)	947.47	-982.8
f _{xx} LLL (ksi)	9.69	5.61
f _{xx} TOTAL (ksi)	17.50	18.30
VR (k)	51.11	

REACTION TABLE		
	W. ABUT.	PIER
RDL (k)	38.5	171.7
RLL (k)	39.4	68.8
RIMP (k)	8.7	14.9
R TOTAL (k)	86.6	255.4

I_s and S_{xx} are the moment of inertia and section modulus of the steel section used in total.
I_c and S_{cy} are the moment of inertia and section modulus of the composite section including the deck.
VR is the maximum Live Load plus range in span used to determine the connector spacing.

DESIGNED	SLM
CHECKED	MUM
DRAWN	RDY
CHECKED	SLM

I-2-E1 4-1-79

TOP OF WEB ELEVATIONS *					
	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5
Brig. W. Abutment	682.09	682.22	682.32	682.22	682.09
Splice #1	683.66	683.78	683.89	683.78	683.66
Brig. Pier	684.11	684.23	684.34	684.23	684.11
Splice #2	684.55	684.67	684.78	684.67	684.55
Brig. E. Abutment	685.19	685.31	685.42	685.31	685.19

* For Fabrication Only - Elevations at splices have been adjusted for Dead Load Deflection.

BEARINGS
F.A. RTE. 408 S
ADAMS COUN
STA. 231+05.30

MODEL: bridge-3 (Sheet)
FILE NAME: c:\p\work\adams\duley\m123125172E90_plansheet.dgn

USER NAME	brandon.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/14/2026	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0058
(FOR INFORMATION ONLY)

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	7
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

B.M. 38A - R.R. Spike in Power Pole, 30' L.F.
of Sta. 53+72 T.R. 531-A Elev. 655.73

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / SHEETS
S. S. I. F. A. 408	1-4HB	ADAMS	102	29	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

GENERAL NOTES

SEE PROPOSAL FOR BORING DATA.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 7/8" Ø OPEN HOLES 15/16" Ø, BOLTS 3/4" Ø OPEN HOLES 13/16" Ø, UNLESS OTHERWISE NOTED.

A CALCIUM NITRATE CORROSION INHIBITOR, AS COVERED IN THE SPECIAL PROVISIONS, SHALL BE USED IN THE CONCRETE FOR CLASS X CONCRETE FOR PARAPETS.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 344,761 LBS.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS AND CROSS FRAMES OVER SUPPORTS.

SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" x 6" - W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

THE CONTRACTOR SHALL DRIVE 1 - CONCRETE TEST PILES IN A PERMANENT LOCATION AT PIER AND ABUTMENTS AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

CONCRETE PILES AT APPROACH BENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.09(c) OF THE STANDARD SPECIFICATIONS.

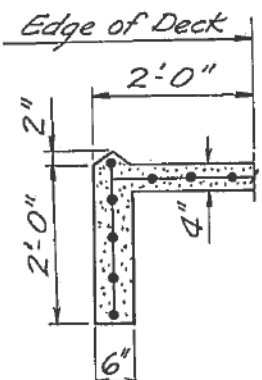
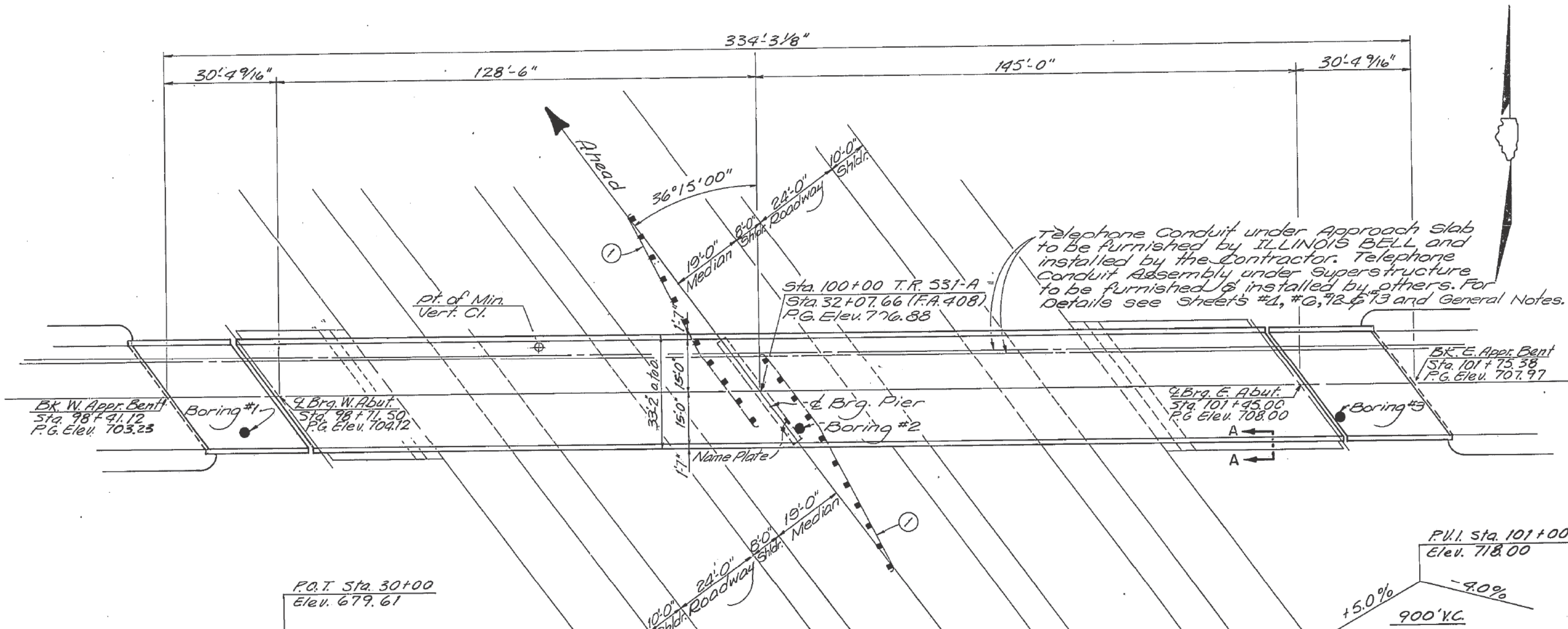
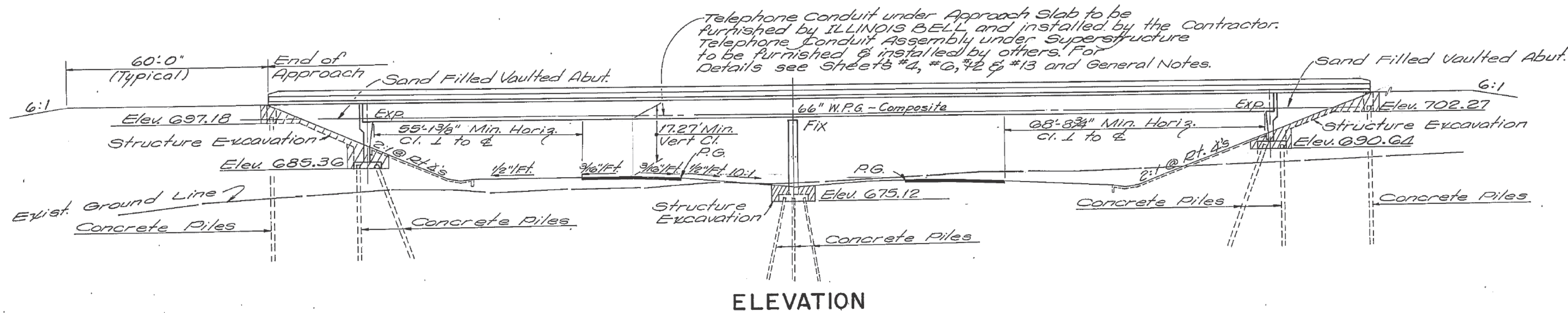
THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

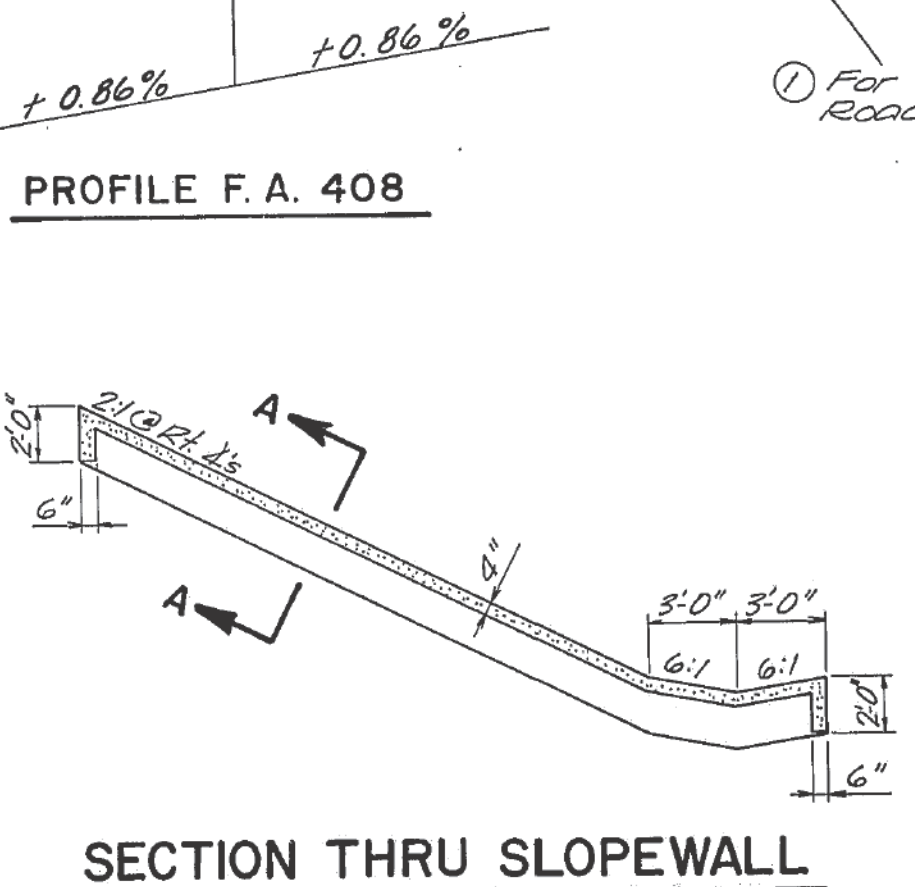
THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS AND ALL SPLICE PLATE MATERIAL OF THE STEEL GIRDERS OR WIDE FLANGE BEAMS.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53 GRADE 60.

ALL MATERIAL REQUIRED FOR THE INSTALLATION OF THE TELEPHONE CONDUIT, AS SHOWN ON THE PLANS, SHALL BE FURNISHED BY THE ILLINOIS BELL TELEPHONE COMPANY. THE CONDUIT UNDER THE APPROACH SLABS (THROUGH THE ABUTMENT BACKWALLS AND APPROACH BENTS) AND THE THREADED INSERTS IN THE BOTTOM OF THE DECK SLAB SHALL BE PLACED BY THE CONTRACTOR. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR CLASS X CONCRETE. THE TELEPHONE COMPANY WILL BE RESPONSIBLE FOR ALL LABOR NECESSARY FOR THE COMPLETION OF THEIR INSTALLATION AND FOR THE COORDINATION OF THEIR WORK WITH THE CONTRACTOR SO AS NOT TO INTERFERE WITH HIS PROGRESS.



DESIGNED - H.M.W.	
CHECKED - G.N.A.	
DRAWN - B.S.B.	
CHECKED - G.N.A.	



PLAN

STATION 32+07.66
BUILT 198 BY
STATE OF ILLINOIS
F.A. RTE 408 SEC. 1-4HB
F.A. PROJ. EDP-408-1(5)
LOADING HS 20
STR. NO.

NAME PLATE

(SEE STD. 2113)
Structure No. to be furnished
by the Engineer.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

DESIGN STRESSES

$f'_c = 3,500$ p.s.i. - Concrete (Load Factor Design)
 $f_y = 20,000$ p.s.i. - Reinf. (Superstructure Only)
 $f_s = 20,000$ p.s.i. - Mild Structural Steel
 $f'_c = 1,400$ p.s.i. - Conc. $n = 9$ Working Stress Design
 $f_s = 24,000$ p.s.i. - Reinf. $V_c = 56$ p.s.i. (Substructure Only)

DESIGN LOADING HS 20-44

Allow 25 p.s.f. for future Wearing
Surface. Design Specifications 19-77
AASHTO and Interims as applicable.

PROFILE T.R. 531-A

ITEM	UNIT	SUPER.	SUBST.	TOTAL
Structure Excavation	Cu. Yd.		284	284
Class X Concrete	Cu. Yd.	378.4	279.3	657.70
Structural Steel	Lump Sum	1		1
Reinforcement Bars	Lbs.	49,710	32,710	82,420
Reinforcement Bars (Epoxy-Coated)	Lbs.	52,150		52,150
Concrete Piles	Lin. Ft.		3,130	3,130
Test Piles, Concrete	Each		3	3
Neoprene Expansion Joint, 2"	Lin. Ft.	80		80
Elastomeric Bearing Assembly, Type I	Each	8		8
Stud Shear Connectors	Each	1,932		1,932
Sand Backfill	Cu. Yds.		226	226
Name Plate	Each		1	1
Slope Wall (4")	Sq. Yds.		456	456



GENERAL PLAN & ELEVATION
T.R. 531-A OVER F.A. RTE. 408
F.A. RTE. 408 SEC. 1-4HB
ADAMS COUNTY
STA. 32+07.66 F.A. 408

PLANS PREPARED BY AMERICAN ENGINEERING CO.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0060
(FOR INFORMATION ONLY)

SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.

F.A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	8
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

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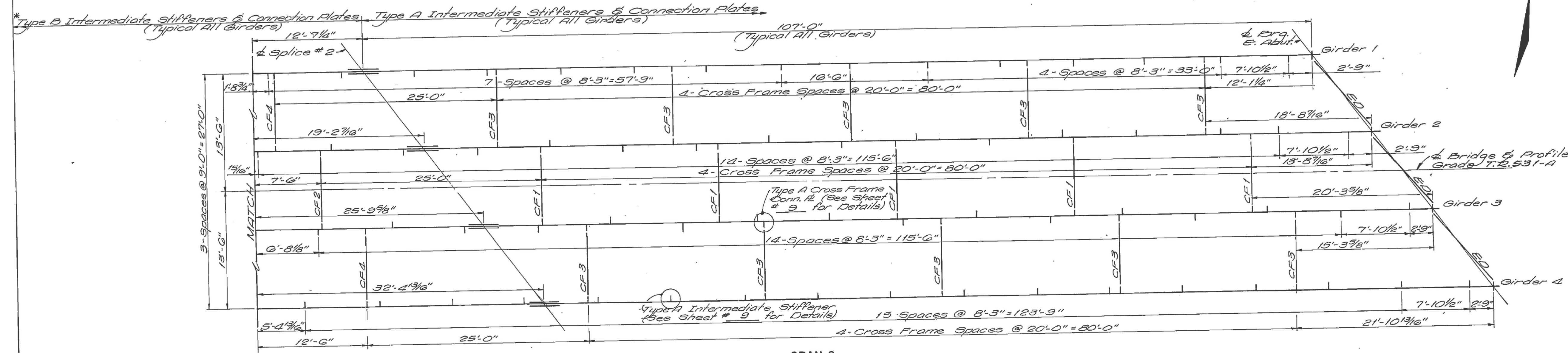
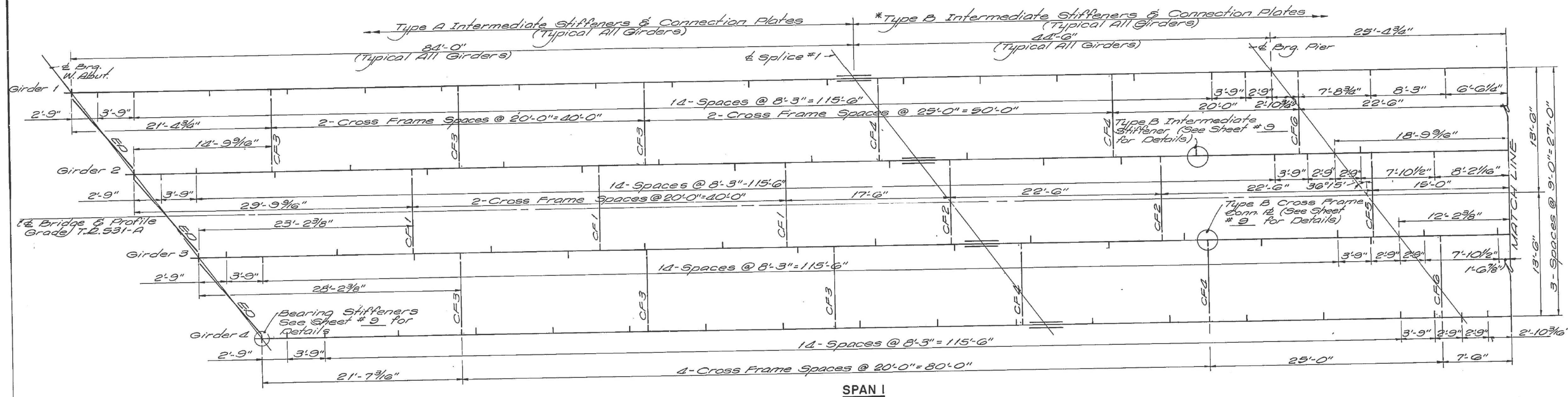
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*Except Type C Connection
Plate for CF5 & CF6

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. 408	I-4HB	ADAMS	102	35
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
SHEETS 16



SPAN 2
FRAMING PLAN

DESIGNED	GNA
CHECKED	SLM
DRAWN	RQY
CHECKED	SLM

STRUCTURAL STEEL
F. A. RTE. 408 SEC. I-4HB
ADAMS COUNTY
STA. 32+07.66 F. A. 408

USER NAME	* brandon.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/14/2026	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

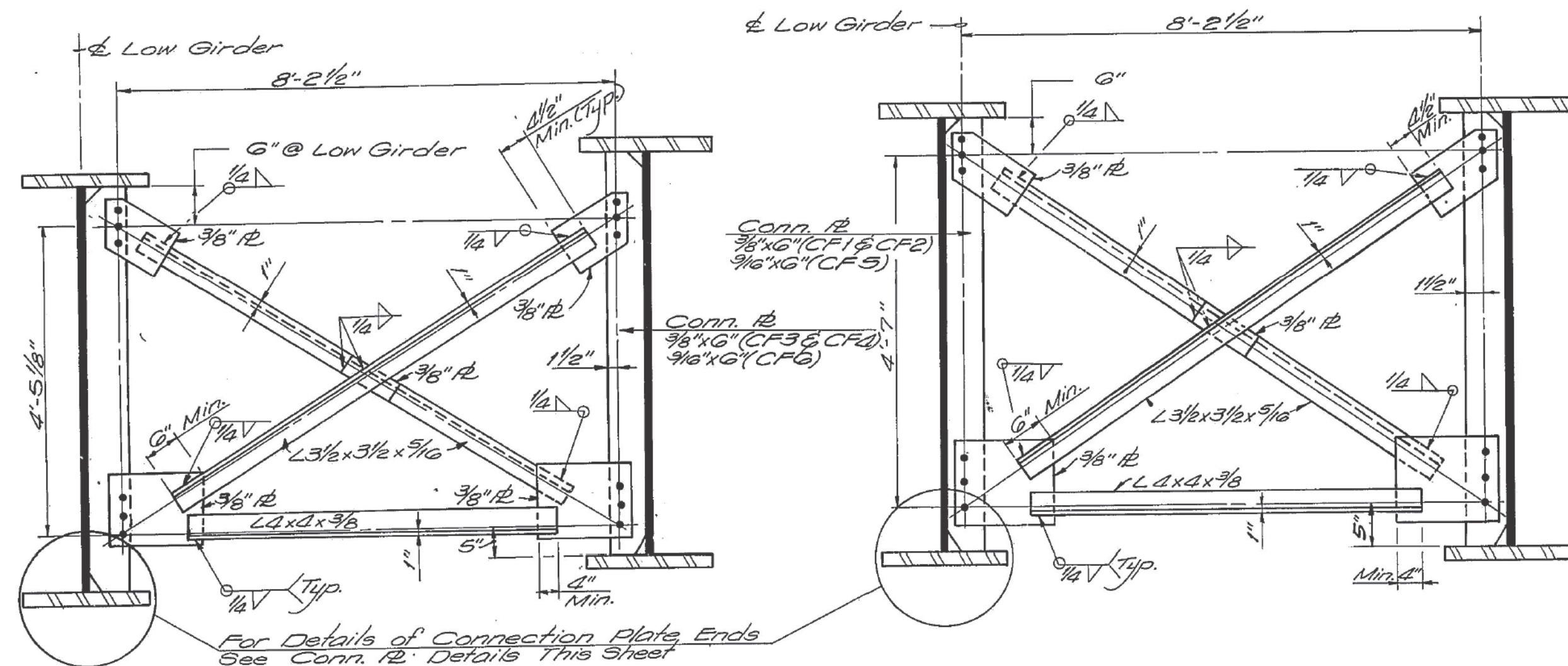
EXISTING BRIDGE PLANS, SN 001-0060
(FOR INFORMATION ONLY)

SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

F.A. I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	9
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

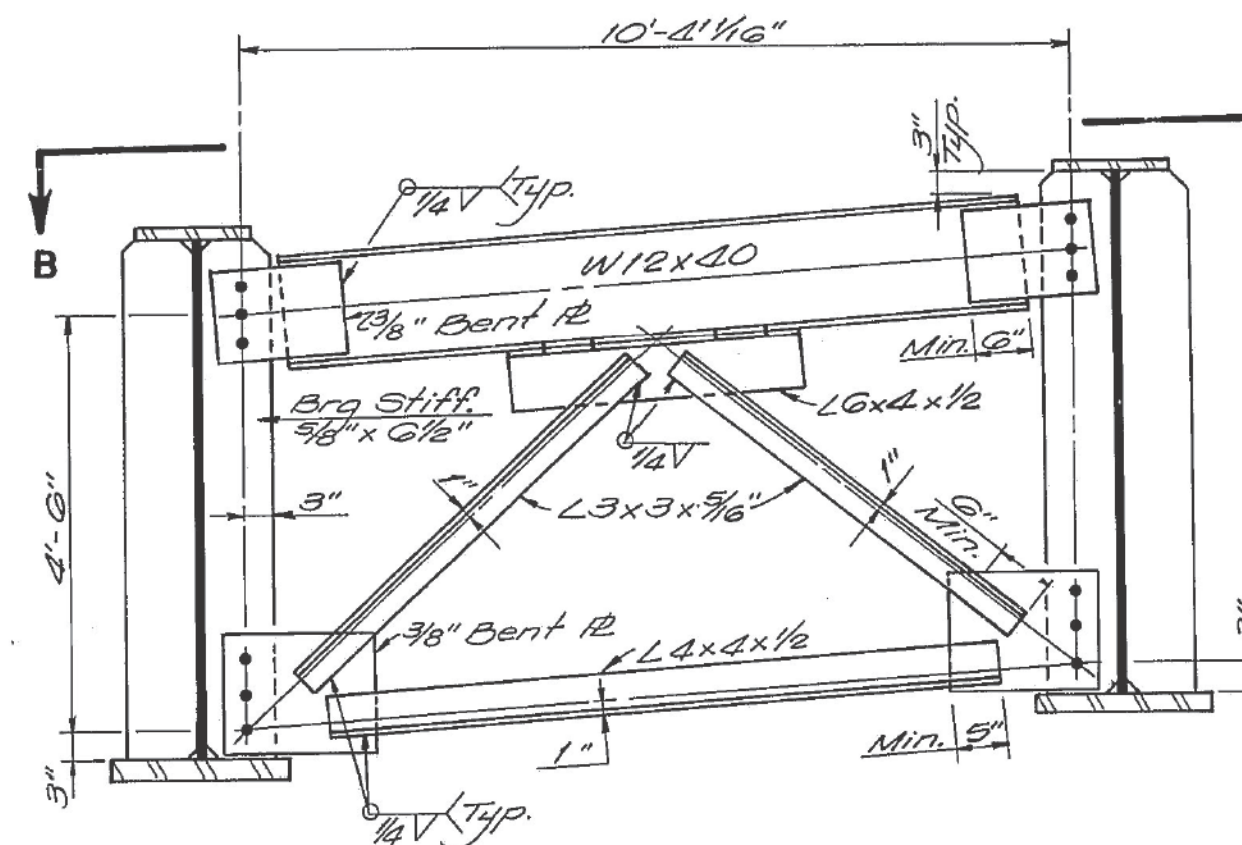
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A. 408	1-4HB	ADAMS	102	37	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

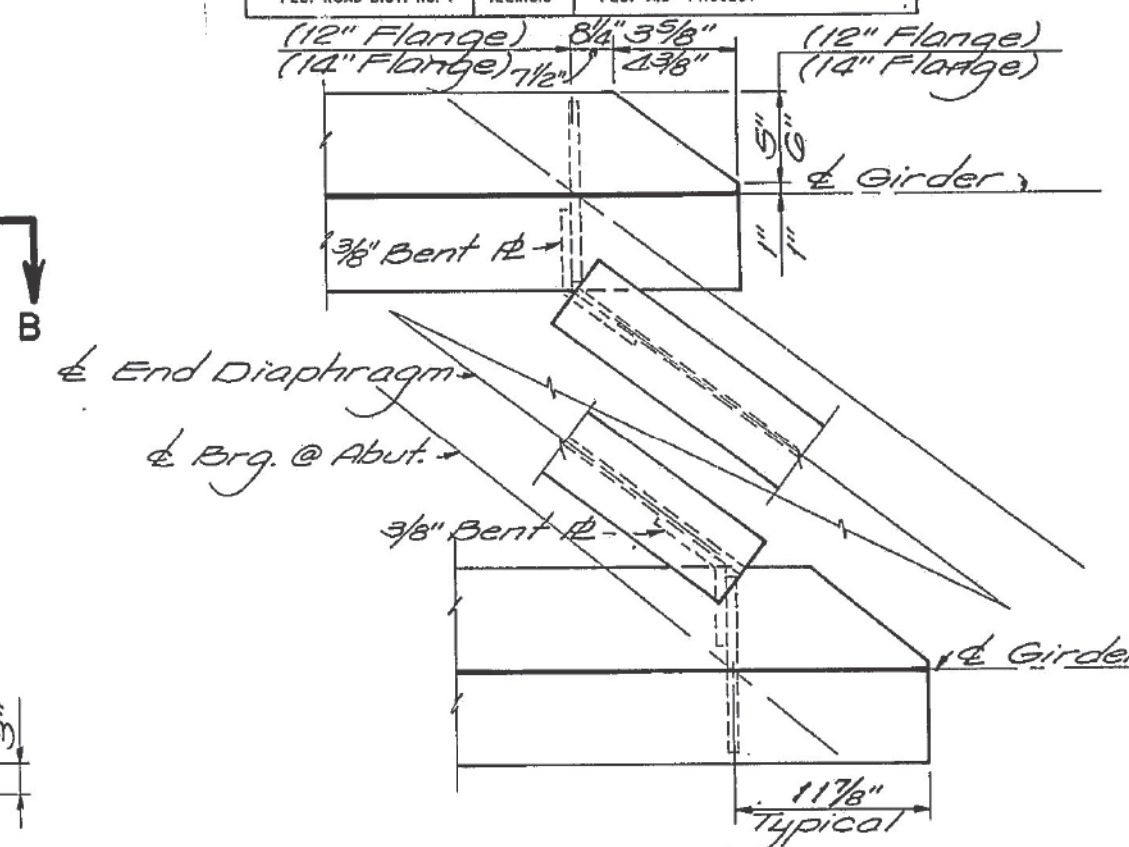


EXTERIOR BAY
CF3, CF4 & CF6

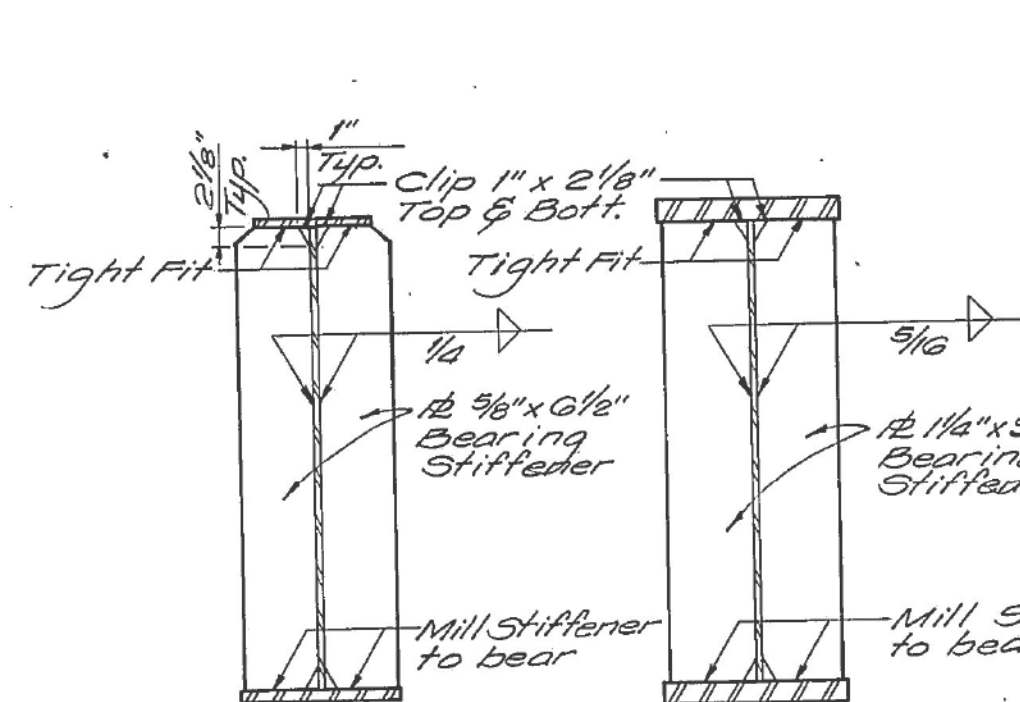
INTERIOR BAY
CF1, CF2 & CF5



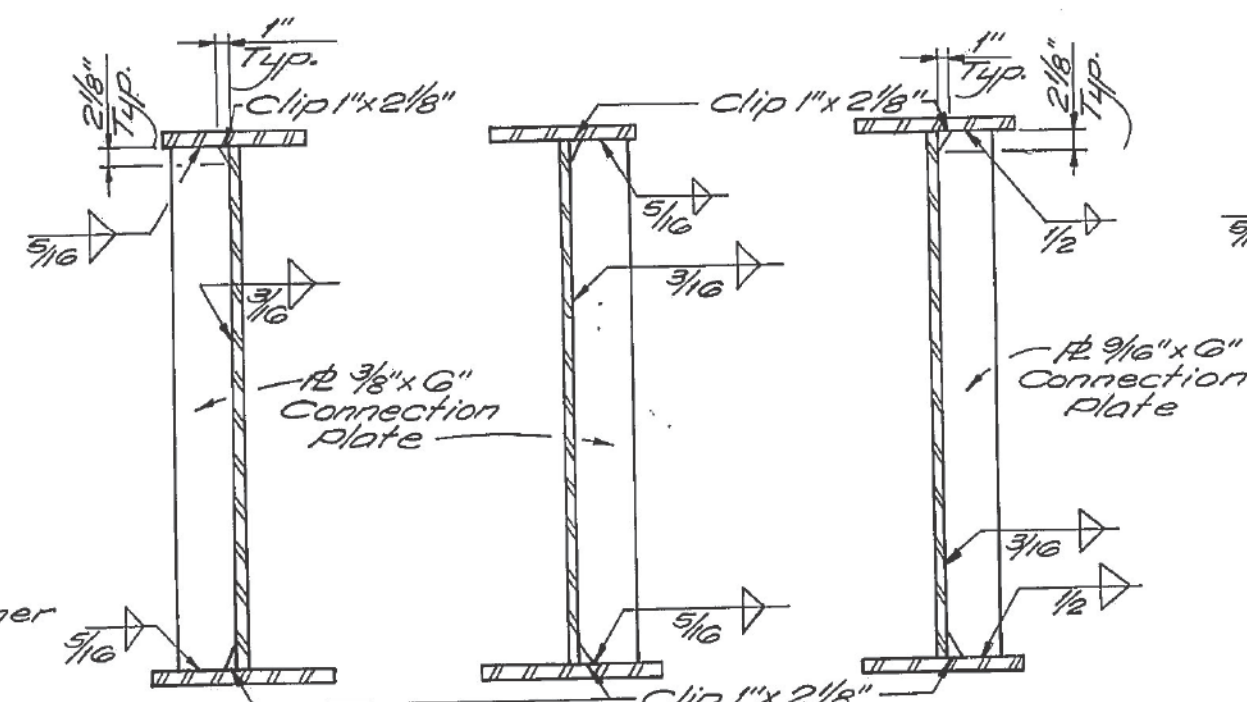
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(ED)



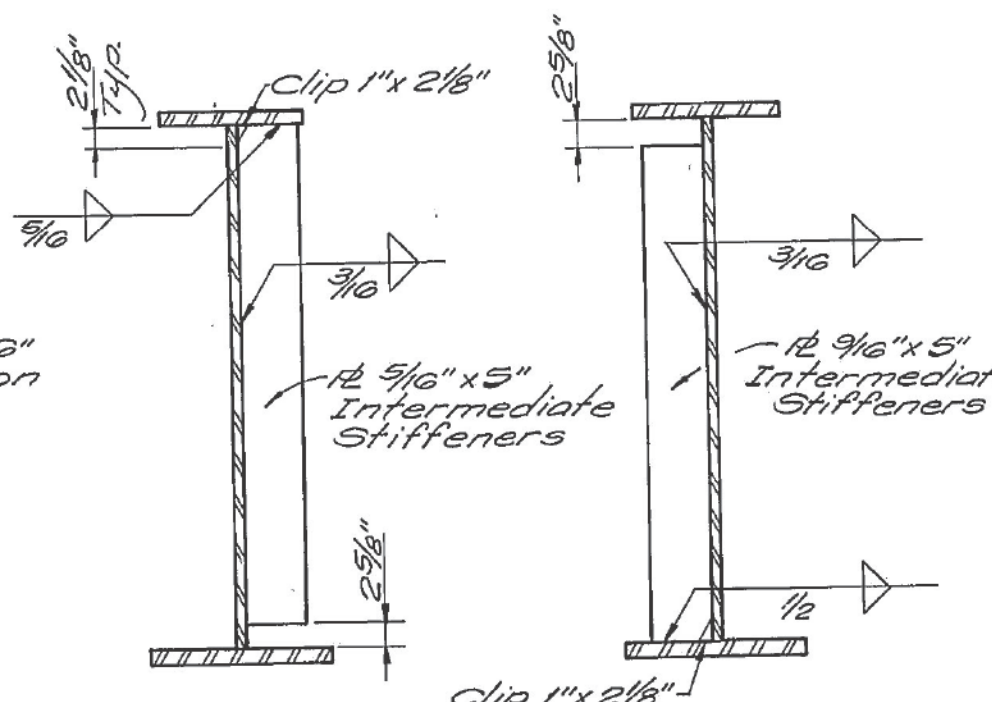
SECTION B-B



ABUTMENT PIER
BEARING STIFFENERS



CROSS FRAME CONNECTION PLATES



INTERMEDIATE STIFFENERS

NOTES:
All Cross Frame Bolts are $\frac{3}{4}$ " ϕ H.S. Bolts. Use $\frac{15}{16}$ " ϕ holes.
Hardened Washers shall be required over $\frac{15}{16}$ " ϕ holes.
All contact surfaces of joints for the cross frames shall be free of paint or lacquer.

STRUCTURAL STEEL
F.A. RTE. 408 SEC. 1-4HB
ADAMS COUNTY
STA. 32+07.66 F.A. 408

DESIGNED	GNA
CHECKED	SLM
DRAWN	RRY
CHECKED	SLM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0060
(FOR INFORMATION ONLY)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	11
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

USER NAME	* brandon.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/14/2026	DATE	-	REVISED	-

SCALE: SHEET 4 OF 6 SHEETS STA. TO STA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. 408	1-4HB	ADAMS	102	38
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10
SHEETS 16

NOTE:

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\pm 1/8$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $1/8$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

Structural steel weldments of equal sections may be substituted for the castings. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be $1/4$ " thickness of plate being welded, except maximum size of weld need not exceed $3/4$ ". Steel castings shall conform to AASHTO M192, Class 90 specifications.

Structural steel weldments shall conform to AASHTO M183 specifications.

GREASE GROOVE ON SADDLE

*NOTE: Grease bearing assembly with molybdenum grease before installation.

*Drill $1/4$ " ϕ hole to grease groove. Drill & Tap for grease fitting. (Typ.)

Cast Steel Shoe

Bore $5 \times 1/50$ " for Case Hardened Steel Pin Recessed Hex. Nut (See Std. Specs)

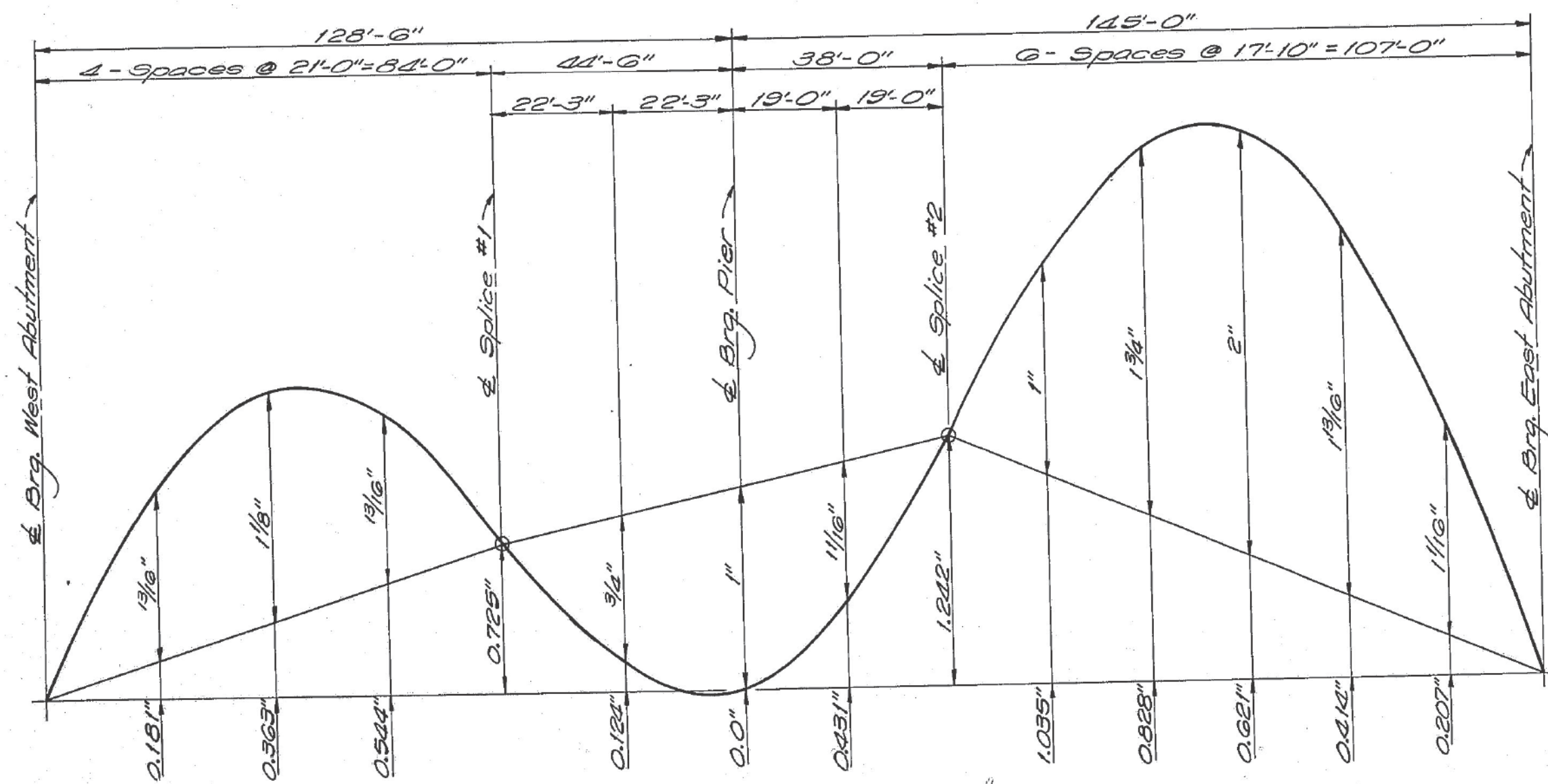
Cast Steel Bolster

$1/8$ " Lead Plate

Grease Fitting (Both Sides)

$1"$ ϕ drilled holes for $7/8"$ high strength bolts

$1 3/4"$ Cored holes for $1 1/2"$ Anchor Bolts with hex. nuts



DESIGNED	GNA
CHECKED	SLM
DRAWN	RRY
CHECKED	SLM

CAMBER DIAGRAM

TOP PLATE PLAN

ELEVATION

BOTTOM PLATE PLAN

SIDE VIEW

FIXED BEARING-AT PIER
NO. REQ'D - 4

BEARINGS
F.A. RTE. 408 SEC 1-4HB
ADAMS COUNTY
STA. 32+07.66 F.A. 408

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

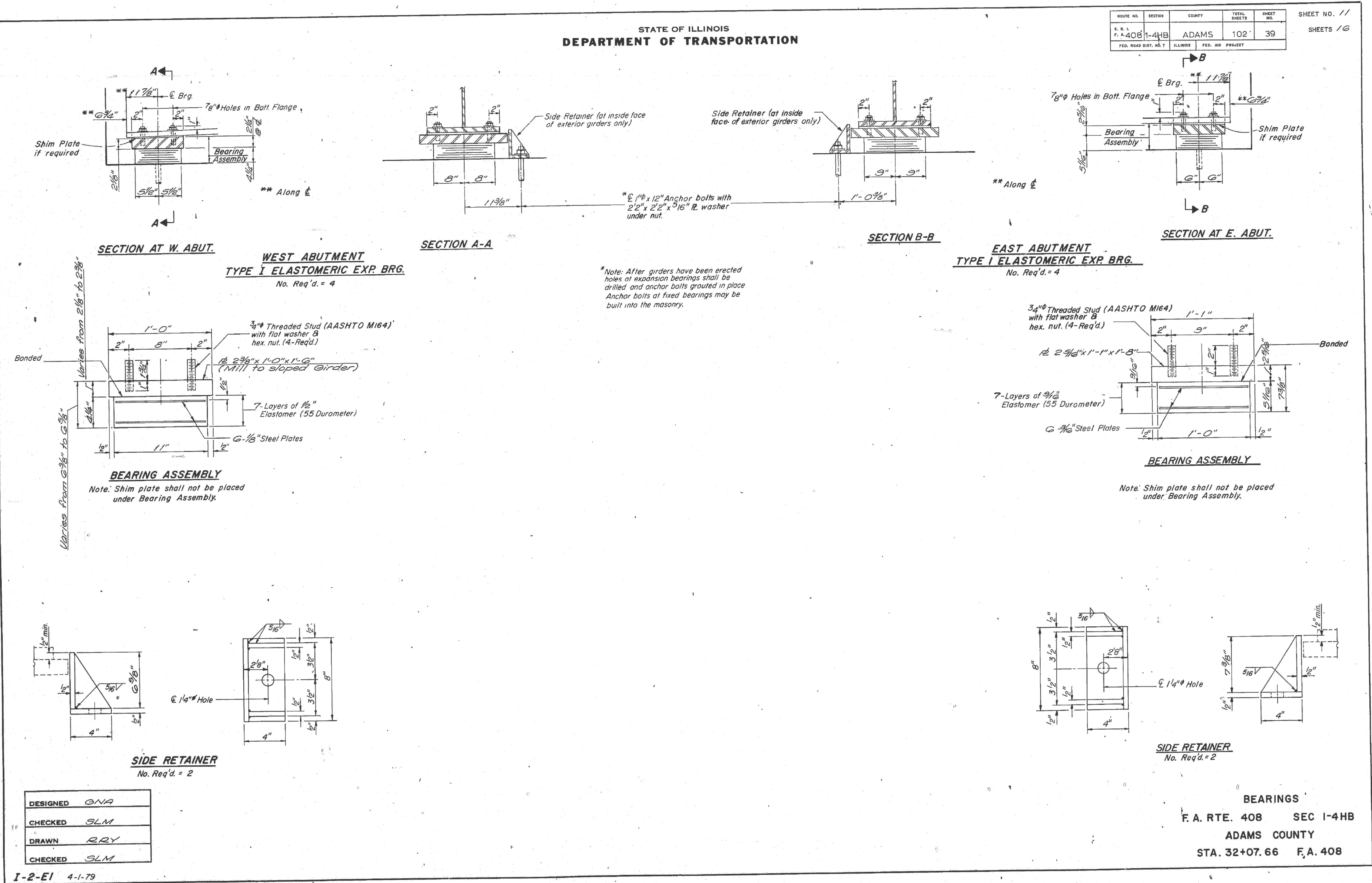
EXISTING BRIDGE PLANS, SN 001-0060
(FOR INFORMATION ONLY)

SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	12
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

USER NAME	* brandon.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
DATE	-	DATE	-	REVISED	-

MODEL: bridge-9 [Sheet]
FILE NAME: c:\pwr_work\bridge\duddley\mtd1231251172E90_plansheet.dgn



USER NAME	brandon.dudley	DESIGNED	-	REVISED	-
DRAWN	-	REVISOR	-	REVISOR	-
CHECKED	-	REVISOR	-	REVISOR	-
DATE	-	REVISOR	-	REVISOR	-

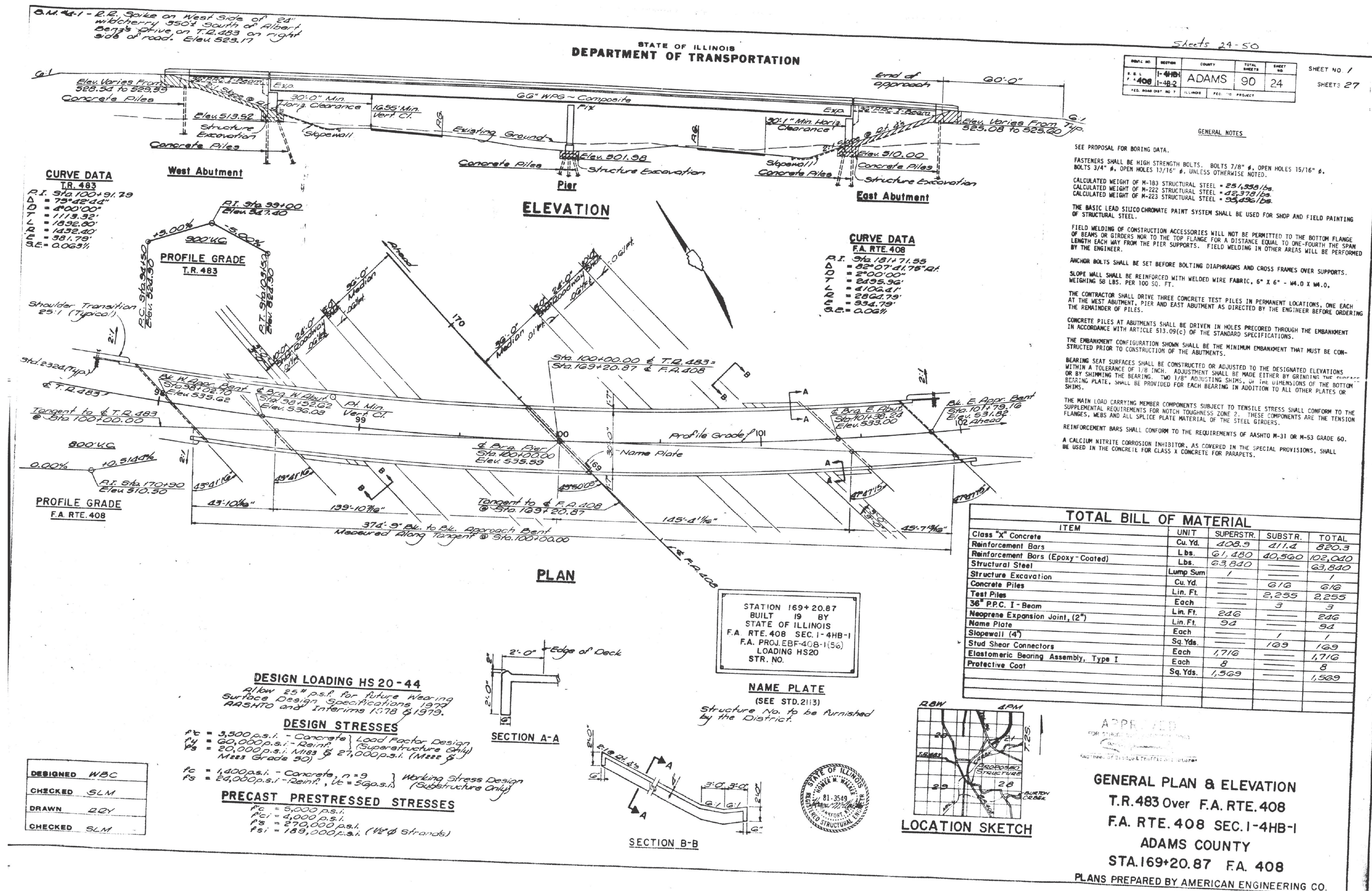
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0060
(FOR INFORMATION ONLY)

SCALE: SHEET 6 OF 6 SHEETS STA. TO STA.

F. A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	13
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

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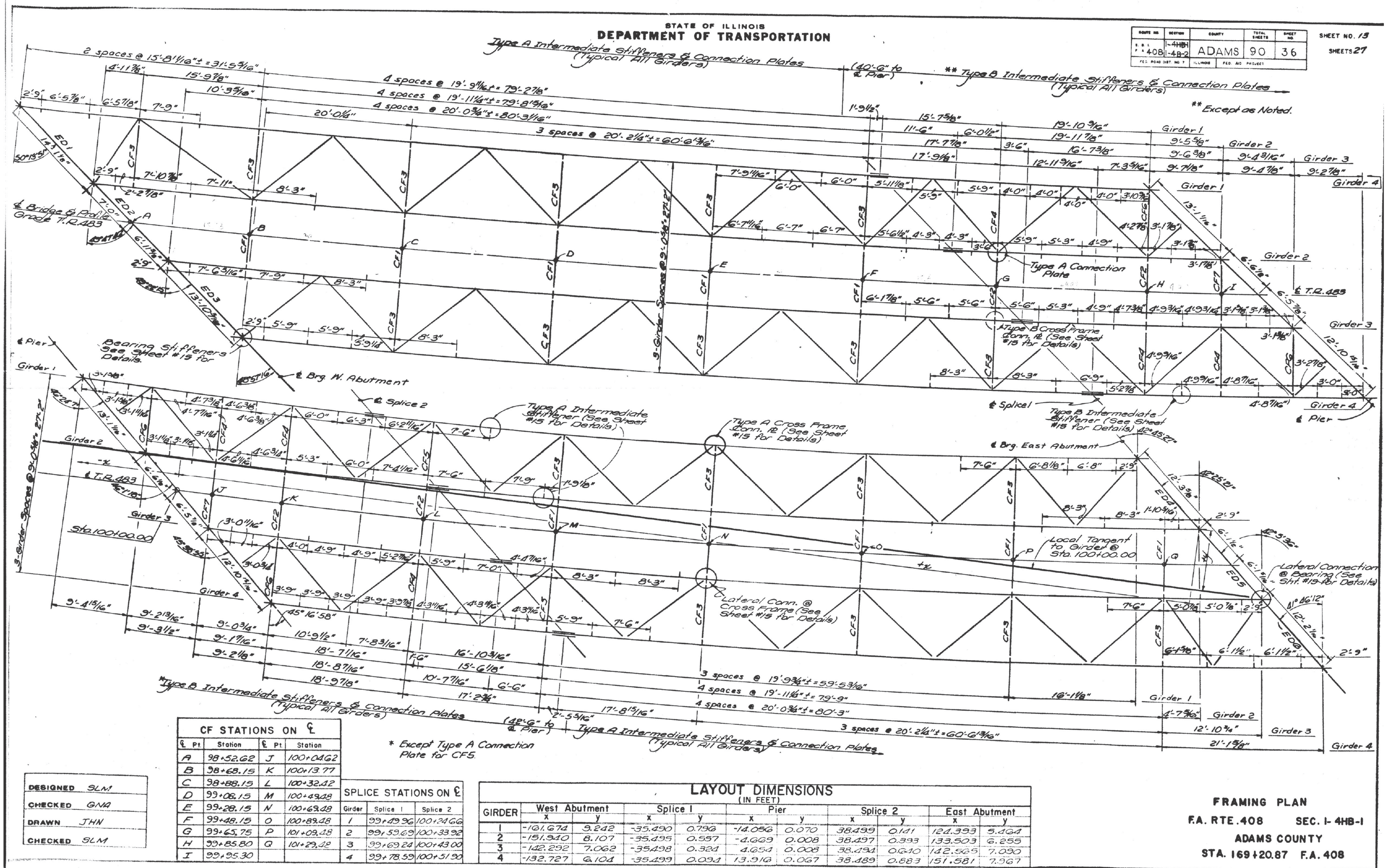
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0061
(FOR INFORMATION ONLY)

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	14
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

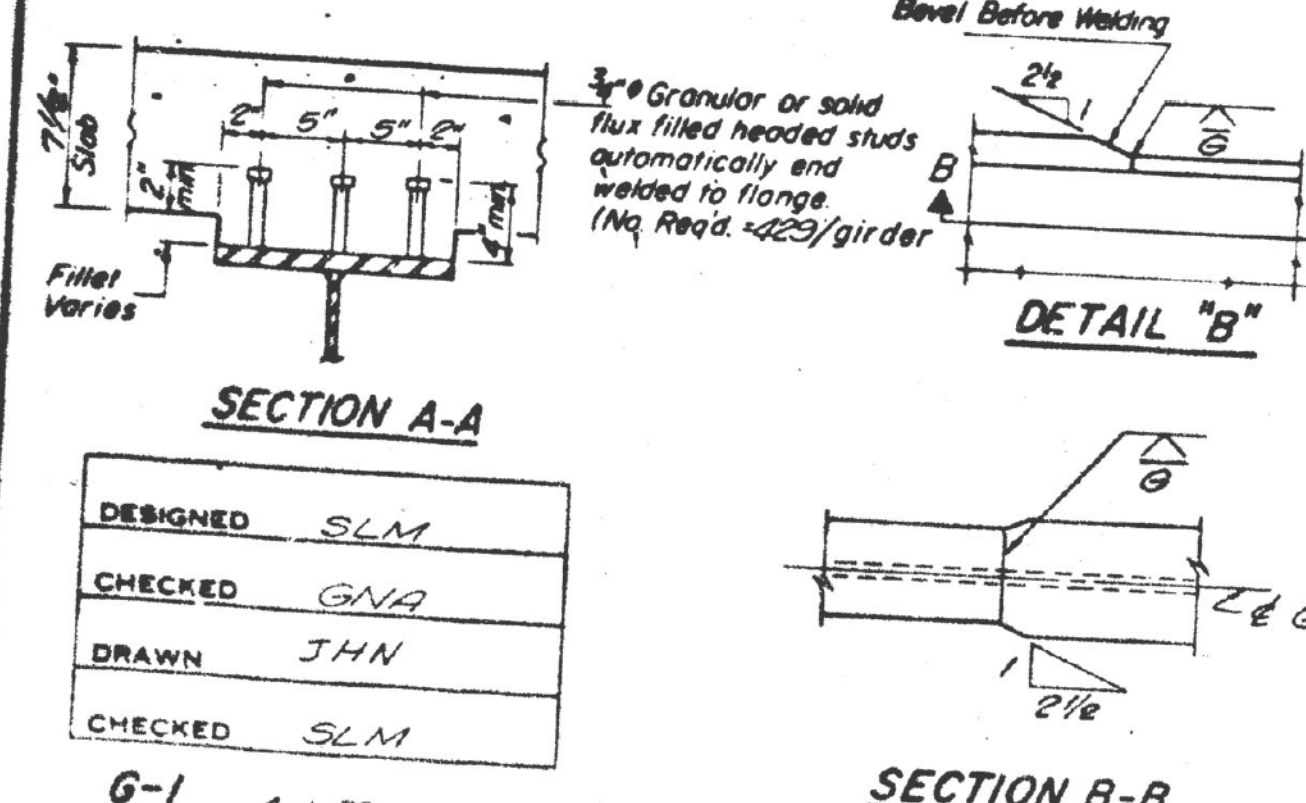
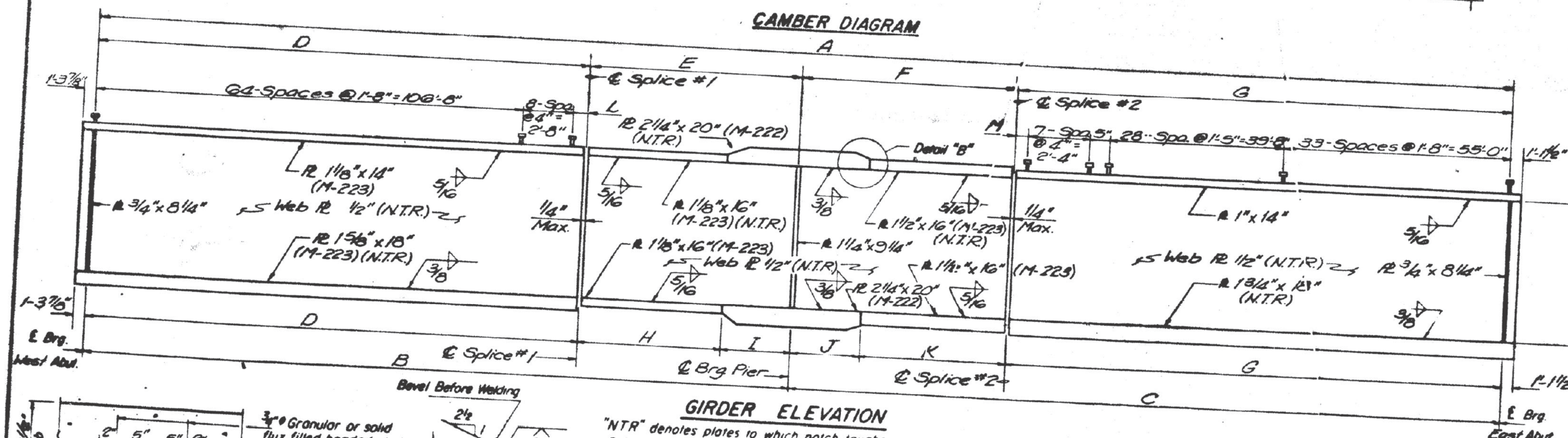
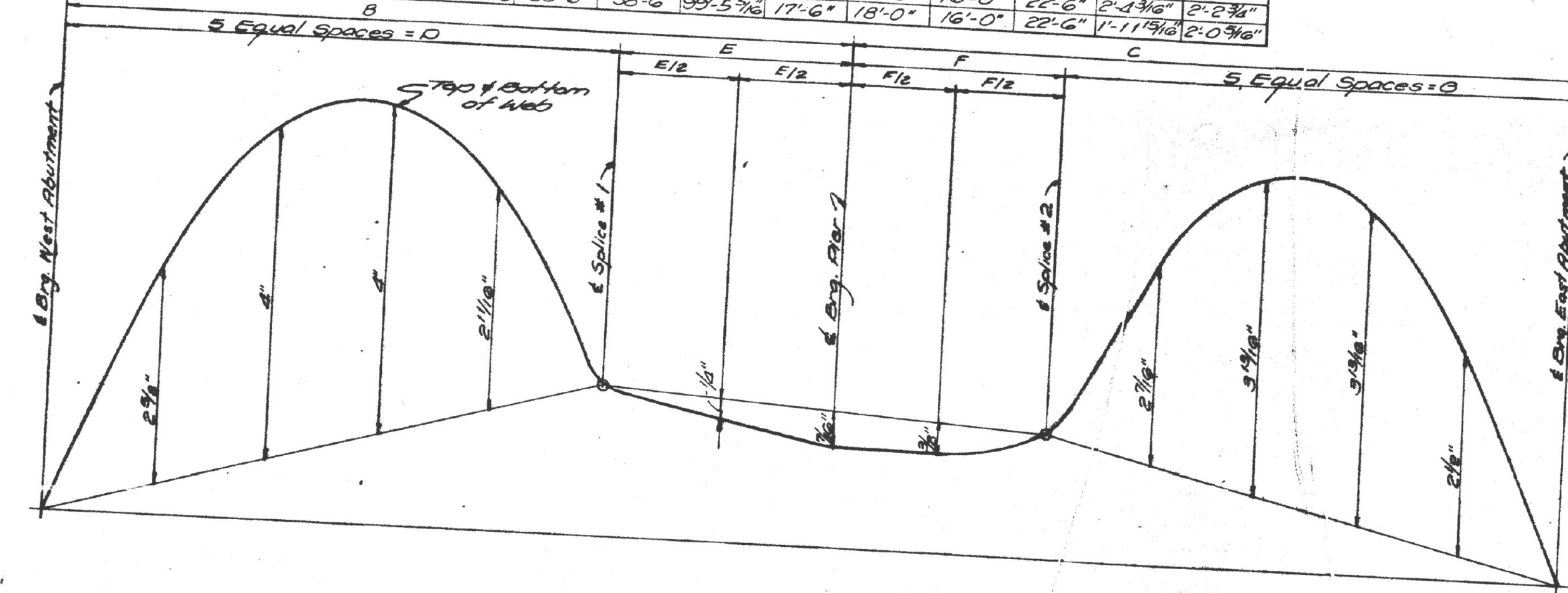
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEETS
1408	1-4HB1	ADAMS	90	37

GIRDER	RADIUS	A	B	C	D	E	F	G	H	I	J	K	L	M
1	1418.8017	286' 6 1/8"	147' 11 5/8"	138' 7 3/8"	112' 5 1/8"	35' 6"	38' 6"	100' 1 1/8"	17' 6"	18' 0"	16' 0"	22' 6"	3' 1 3/8"	2' 8 3/8"
2	14278572	285' 11 1/8"	147' 6 1/8"	138' 4 1/8"	112' 0 1/8"	35' 6"	38' 6"	99' 10 1/8"	17' 6"	18' 0"	16' 0"	22' 6"	3' 1 3/8"	2' 8 3/8"
3	14369125	285' 3 3/8"	147' 2 1/8"	138' 1 3/8"	111' 8 3/8"	35' 6"	38' 6"	99' 13 1/8"	17' 6"	18' 0"	16' 0"	22' 6"	3' 1 3/8"	2' 8 3/8"
4	14459683	284' 9 1/8"	146' 9 3/8"	137' 11 3/8"	111' 3 3/8"	35' 6"	38' 6"	99' 5 3/8"	17' 6"	18' 0"	16' 0"	22' 6"	3' 1 3/8"	2' 8 3/8"



GIRDER ELEVATION

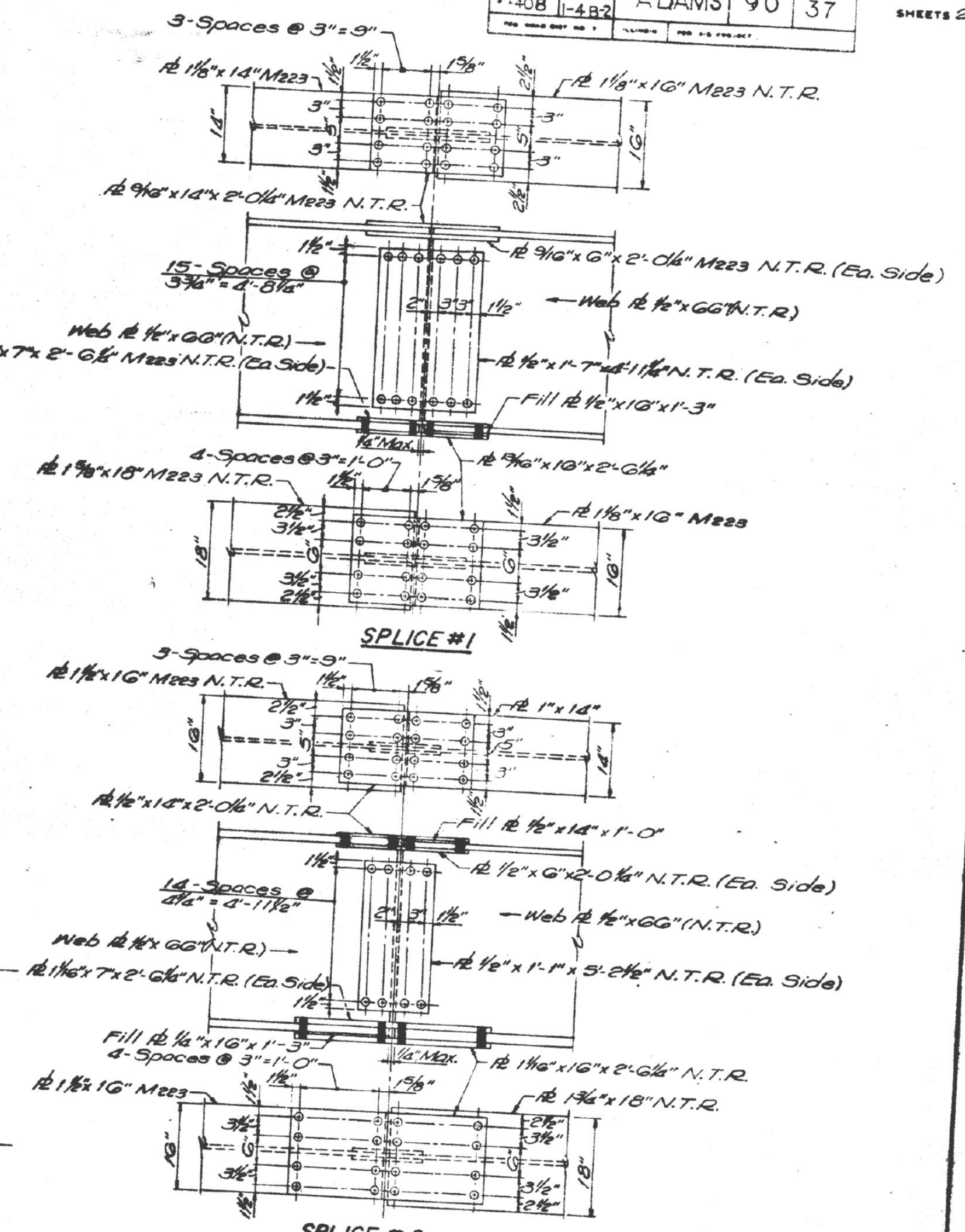
"NTR" denotes plates to which notch toughness requirements are applicable.

Notes:

1. N.T.R. indicates Notch Toughness Requirements. See General Notes.
2. Use 3/4" H.S. bolts for all cross frame connections.
3. Use oversize holes for cross frame connections as follows:
1 1/2" holes in gusset plates, angles and bearing stiffeners for all cross frames.
1 1/2" holes in gusset plates, angles and girder webs for all lateral connections.
Hardened washers shall be provided under both bolt head and nut. All contact surfaces of joints for diaphragms shall be free of paint and lacquer.
4. Splice bolts are 7/8" H.S. bolts. Use 1 1/2" holes.

REACTION TABLE			
	W. ABUT.	PIER	E. ABUT.
R DL (k)	86.9	291.0	77.7
R LL (k)	55.8	117.3	54.5
R IMP (k)	10.2	21.9	10.3
R TOT (k)	152.9	430.2	142.5

TOP OF WEB ELEVATIONS *				
GIRDER NO.	1	2	3	4
Brig. W. Abut.	534.29	534.93	535.53	536.17
Splice No. 1	534.46	534.97	535.48	536.03
Brig. Pier	534.01	534.29	534.95	535.51
Splice No. 2	533.63	534.09	534.62	535.14
Brig. E. Abut.	533.63	534.29	534.95	535.51



MOMENT & SHEAR TABLE			
	0.4 SPAN 1	PIER	0.6 SPAN 2
Is (in ⁴)	60,452.0	116,823.4	59,290.0
S _{xx} (in ³)	2,104.7	3,314.1	2,195.3
DL (k/ft)	1.180	1.334	1.182
MDL (ft-k)	1,720.4	3,461.7	1,349.9
f _{sd} DL (ksi)	9.81	12.53	7.41
Ic (in ⁴)	93,541.8	116,823.4	94,857.3
S _{cy} (in ³)	2,440.3	3,314.1	2,561.0
SDL (k/ft)	0.393	0.393	0.393
MSDL (ft-k)	666.6	914.9	540.1
f _{sd} SDL (ksi)	3.28	3.31	2.53
Ic (in ⁴)	129,636.9	116,823.4	133,761.2
S _{cy} (in ³)	2,657.0	3,314.1	2,795.3
MLL (ft-k)	1,628.5	1,591.9	1,531.7
MIMP (ft-k)	299.3	297.7	290.5
MLLTOTAL (ft-k)	1,927.8	1,889.6	1,822.2
f _{sd} LL (ksi)	8.70	6.84	7.82
f _{sd} S (ksi)	2.88	2.49	2.29
f _{sd} TOTAL (ksi)	11.58	9.33	10.11
VR (k)	70.1	25.17	20.05

STRUCTURAL STEEL
F.A. RTE. 408 SEC. 1-4HB-1
ADAMS COUNTY

MODEL: bridge-12 (Steel)
FILE NAME: c:\pwworking\adams\project\123125172E90.plansheet.dgn

USER NAME	brandan.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/14/2026	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0061
(FOR INFORMATION ONLY)

SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	16

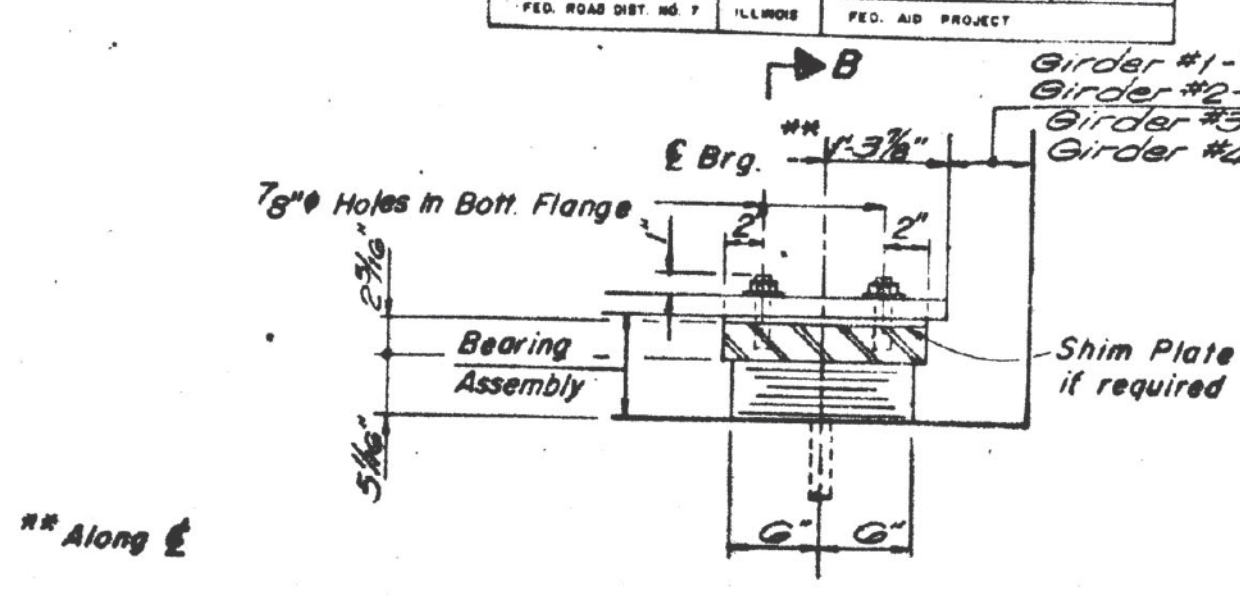
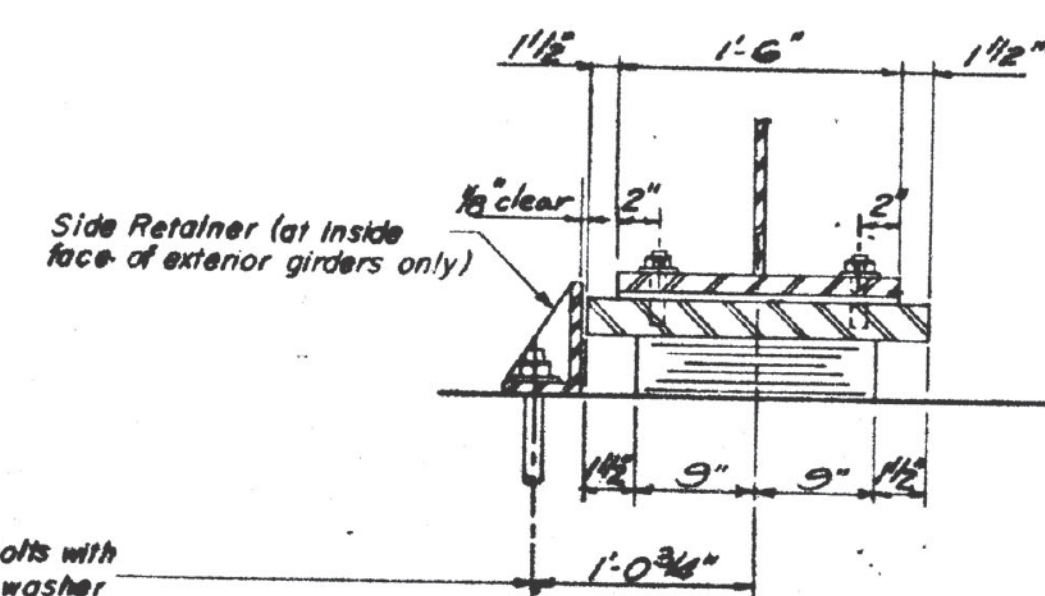
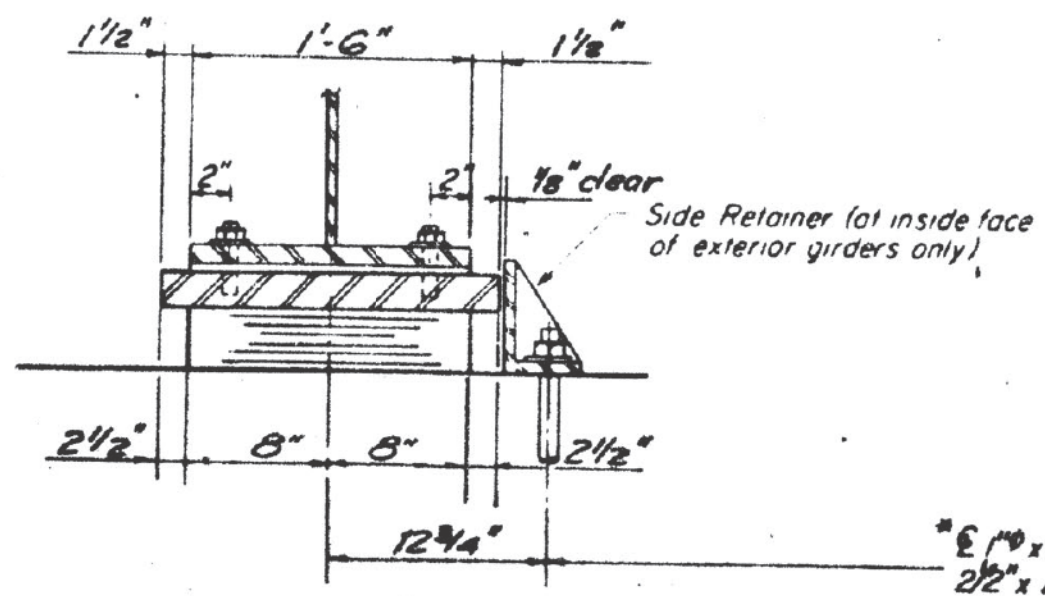
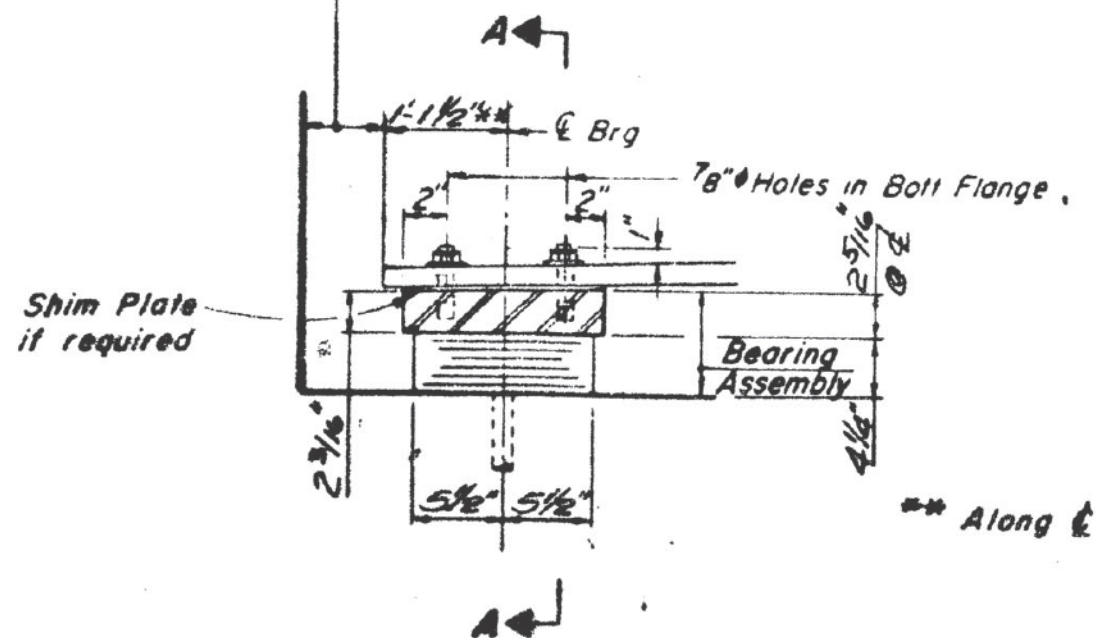
CONTRACT NO. 72E90

ILLINOIS FED. AID PROJECT

Girder #1-0'5 1/2" x 1/2" x 1/2"
Girder #2-0'5 1/2" x 1/2" x 1/2"
Girder #3-0'5 1/2" x 1/2" x 1/2"
Girder #4-0'5 1/2" x 1/2" x 1/2"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-408	1-408-1	ADAMS	90	39
F.A. RTE. 408	SEC. 1-408-1	ADAMS	22	18
FED. AID PROJECT	CONTRACT NO. 72E90			



SECTION AT E. ABUT.

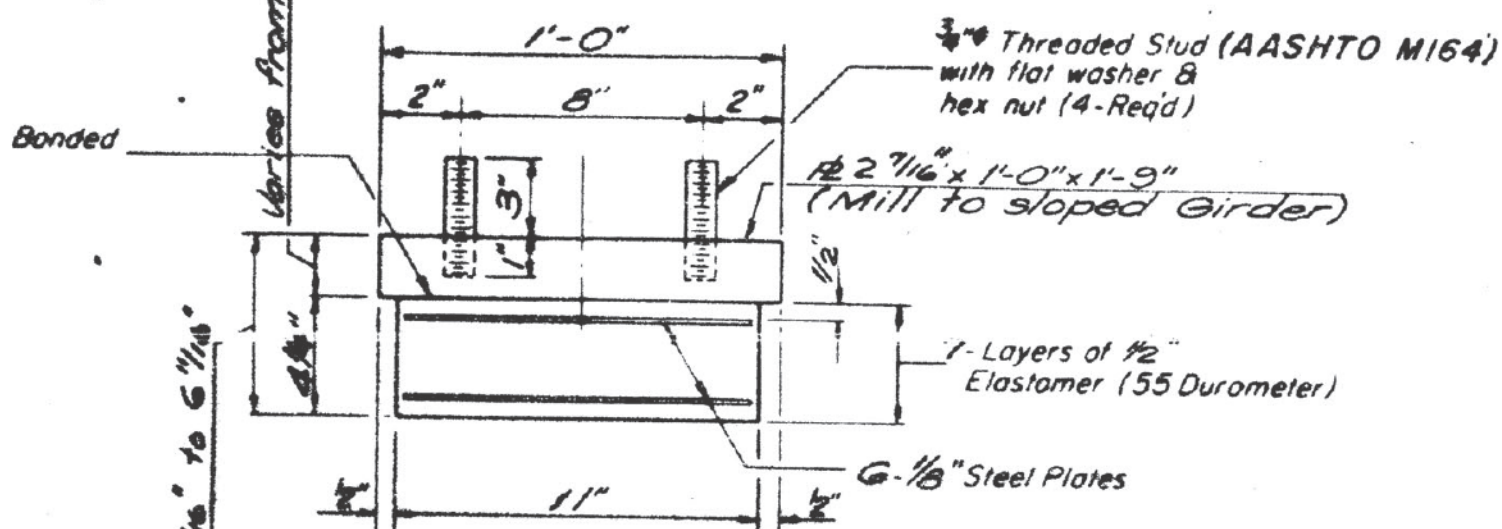
EAST ABUTMENT
TYPE I ELASTOMERIC EXP. BRG.
No. Req'd. = 4

SECTION A-A

SECTION B-B

WEST ABUTMENT
TYPE I ELASTOMERIC EXP. BRG.
No. Req'd. = 4

SECTION AT W. ABUT.



BEARING ASSEMBLY

Note: Shim plate shall not be placed under Bearing Assembly.

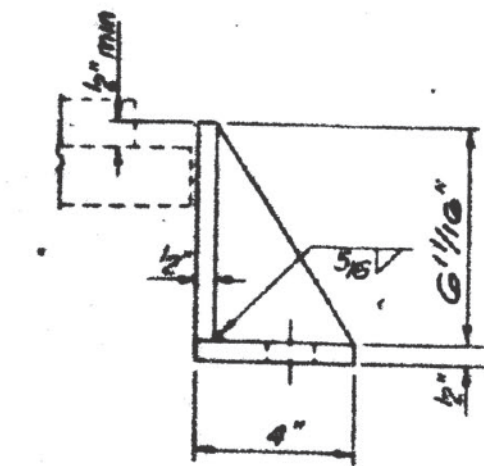
* Drill 1/4" hole to grease groove. Drill and Tap for grease fitting. (Typ.)

Cast Steel Shoe

Bore 5" ± 1/50" for Case Hardened Steel Pin Recessed Hex. Nut (See Std. Specs)

Cast Steel Bolster

1/8" Lead Plate



SIDE RETAINER

No. Req'd. = 2

DESIGNED	GNA
CHECKED	SLM
DRAWN	JHN
CHECKED	SLM

I-2-EI 4-1-79

GREASE GROOVE ON SADDLE

*NOTE: Grease bearing assembly with molybdenum grease before installation.

TOP PLATE PLAN

ELEVATION

BOTTOM PLATE PLAN

NOTE:

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. Structural steel weldments of equal sections may be substituted for the castings. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4". Steel castings shall conform to AASHTO M192, Class 90 Specifications. Structural steel weldments shall conform to AASHTO M183 Specifications.

1" drilled holes for 7/8" high strength bolts

Grease Fitting (Both Sides)

1 1/2" Cored holes for 1 1/2" Anchor Bolts with hex. nuts

FIXED BEARING AT PIER

NO REQ'D. - 4

3/4" Threaded Stud (AASHTO M164) with flat washer & hex. nut. (4-Req'd.)

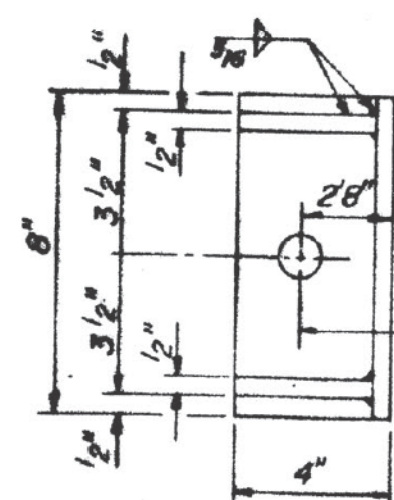
7-Layers of 3/16" Elastomer (55 Durometer)

6 3/8" Steel Plates

BEARING ASSEMBLY

Note: Shim plate shall not be placed under Bearing Assembly.

*NOTE: After girders have been erected holes of expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



SIDE RETAINER

No. Req'd. = 2

BEARINGS

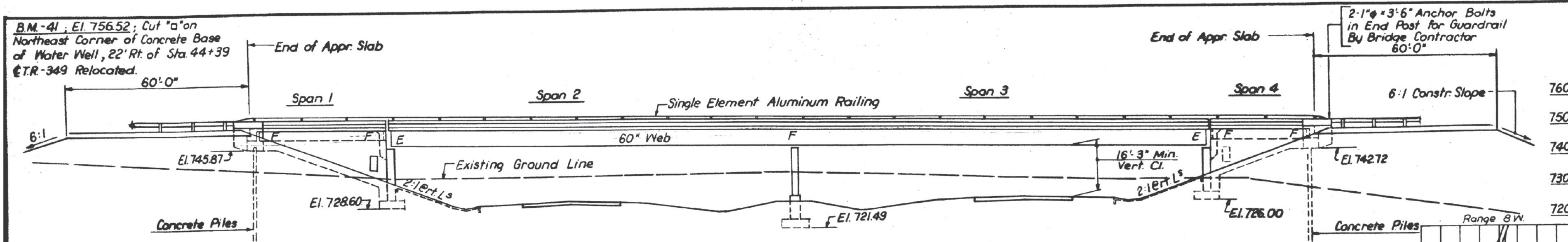
F.A. RTE. 408 SEC. 1-408-1
ADAMS COUNTY
STA. 169+20.87 F.A. 408

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0061
(FOR INFORMATION ONLY)

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	18
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 407	1-6HB	ADAMS	110	29
FED. ROAD DIV. NO. 4		ILLINOIS	PROJECT	

GENERAL NOTES

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SHOWN.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" Ø; OPEN HOLES 13/16" Ø, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 714,940 LBS.

THE BASIC LEAD SILICO CHROMATE PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.

SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" X 6" MESH, WEIGHING 58# PER 100 SQ. FT.

THE CONTRACTOR SHALL DRIVE ONE (1) CONCRETE TEST PILE IN A PERMANENT LOCATION AT THE WEST AND EAST APPROACH BENTS AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

CONCRETE PILES AT APPROACH BENTS SHALL BE DRIVEN IN HOLES PRECURED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.09(c) OF THE STANDARD SPECIFICATIONS.

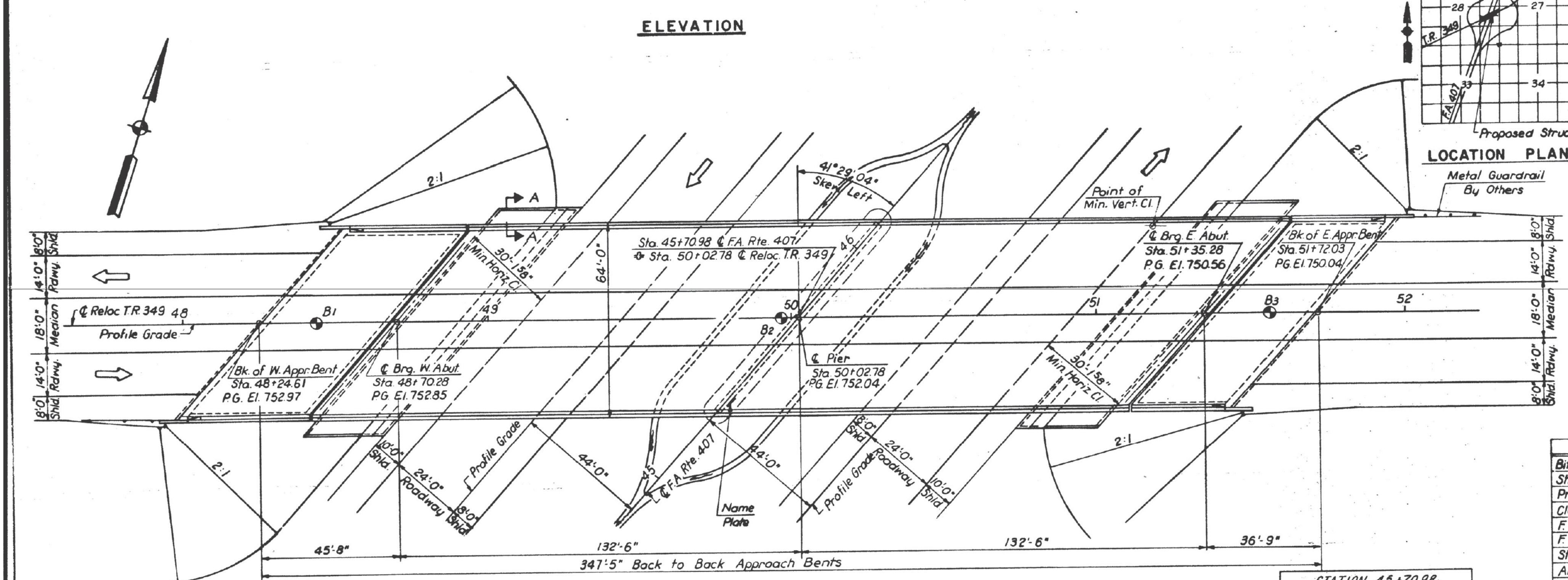
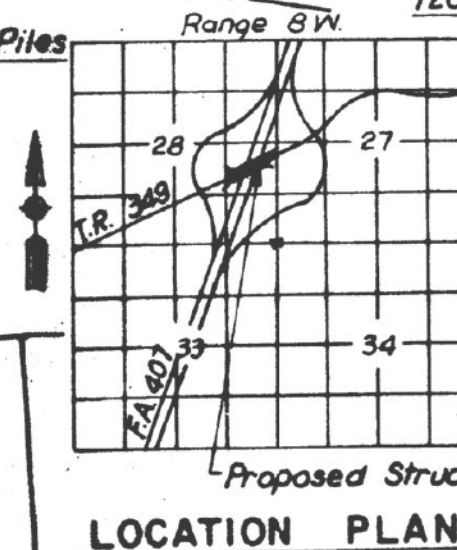
STRUCTURE EXCAVATION FOR STRUCTURES INCLUDES EXCAVATION FOR SLOPE WALL.

THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONSTRUCTION JOINT AT THE TOP OF THE SLAB SHALL BE CONSTRUCTED OF CLASS X CONCRETE EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.

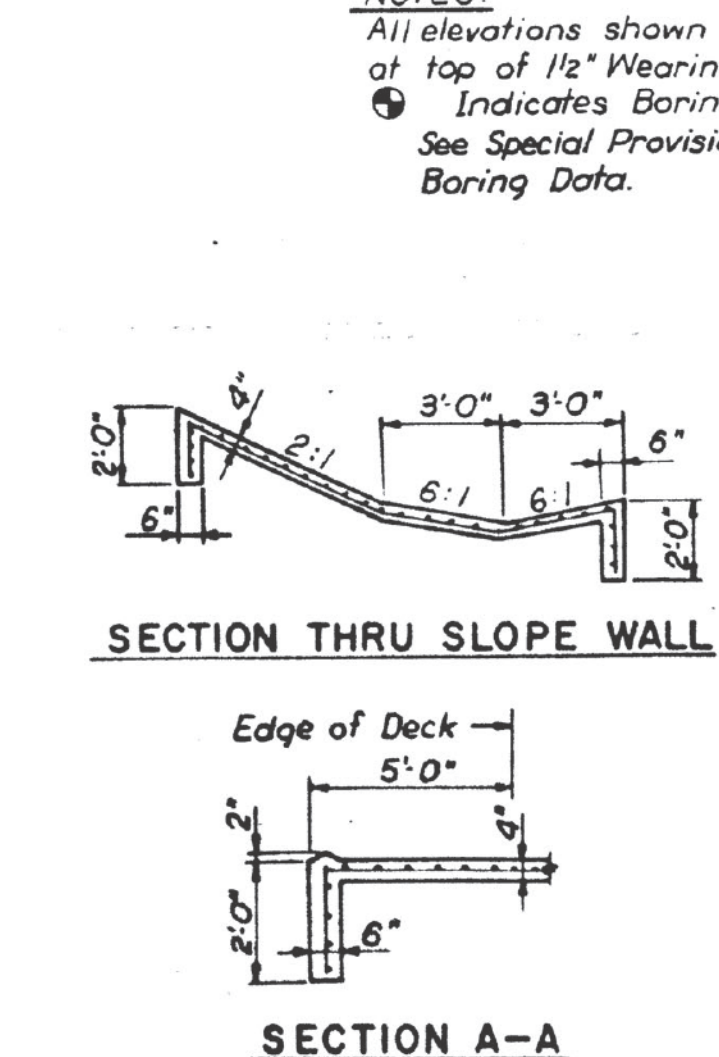
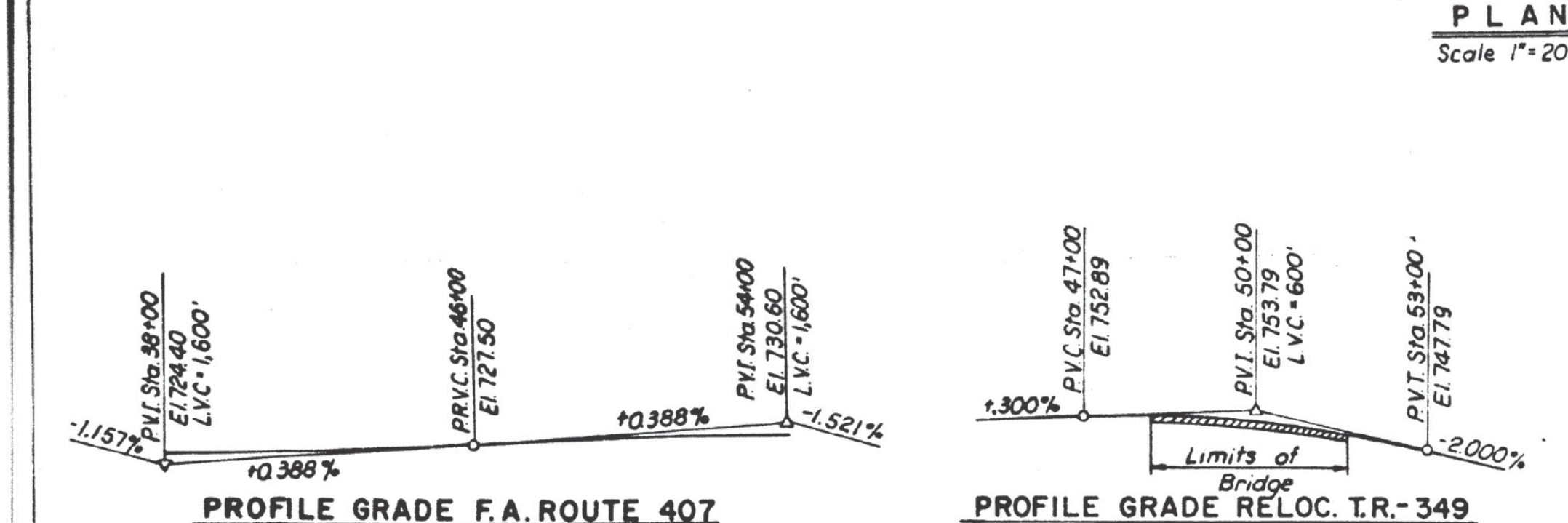
PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATER-PROOFING MEMBRANE SYSTEM IS APPLIED.

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.



TOTAL BILL OF MATERIAL

Item	Unit	Superstr.	Substr.	Total
Bit Conc Surface Course Class I	Ton	145	—	145
Structure Excavation	Cu. Yd.	—	614	614
Protective Coat	Sq. Yd.	254	16	270
Class X Concrete	Cu. Yd.	746.6	629.5	1376.1
F & E PP Conc. I Bm. 36"	Lin. Ft.	523	—	523
F & E Structural Steel	L. Sum	1	—	1
Stud Shear Connectors	Each	3294	—	3294
Aluminum Railing	Lin. Ft.	722	—	722
Reinforcement Bars	Lb.	183,550	70,080	253,630
Furn. & Dr. Concrete Piles	Lin. Ft.	—	1068	1068
Test Pile Concrete	Each	—	2	2
Name Plate	Each	—	1	1
Slope Wall	Sq. Yd.	—	620	620
Waterproofing Membrane System	Sq. Yd.	1709	—	1709
Neoprene Expansion Joint 2"	Lin. Ft.	169	—	169



DESIGN SPECIFICATIONS
1973 AASHTO as applicable

DESIGN STRESSES

$f_c = 1,200$ psi Deck Slab
 $f_c = 1,400$ psi Substructure, Curb & Parapet
 $n = 10$
 $f_s = 20,000$ psi Structural Steel
 $f_s = 20,000$ psi Reinforcement
 $v = 75$ psi Footings
L.L. Deflection: 1/200

Precast Prestressed Concrete I-Beams

$f_c = 5,000$ psi
 $f_{ci} = 4,000$ psi
 $f_s = 270,000$ psi (Strands)
 $f_s = 189,000$ psi (Strands)

LOADING
HS 20-44
25'10" Future Wearing Surface

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
[Signature]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN 6-103

RELOCATED TR-349

OVER
F.A. ROUTE 407
STATION 45 + 70.98

F.A. RT. 407 ADAMS COUNTY SECTION 1-6HB

CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET 1 of 19

DESIGNED BY: AT
DRAWN BY: KM
CHECKED BY: TT

MODEL: bridge-15 (Sheet)
FILE NAME: c:\pwworking\brdudley\mtd123125172E90.plansheet.dgn

USER NAME	brandan.dudley	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/14/2026	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS, SN 001-0048
(FOR INFORMATION ONLY)

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	19
CONTRACT NO. 72E90				
ILLINOIS FED. AID PROJECT				

[illegible]

Hand-drawn structural drawing of a bridge girder section. The drawing shows a cross-section of a girder with a height of 60 inches. The top flange is 5 1/2 inches thick. The web is 1/2 inch thick. The bottom flange is 5 1/2 inches thick. The drawing includes various dimensions and labels for components and materials. Key dimensions include: 30'-Spa. @ 1'-9" = 52'-6" for the top flange; 25'-Spa. @ 1'-5" = 35'-5" for the web; 3'-Spa. @ 4" = 1'-0" for the bottom flange; 2'-0" for the top flange thickness; 1'-4" for the web thickness; 1'-0" for the bottom flange thickness; 2'-0" for the top flange thickness; 1'-4" for the web thickness; 1'-0" for the bottom flange thickness; 2'-0" for the top flange thickness; 1'-4" for the web thickness; 1'-0" for the bottom flange thickness; 2'-0" for the top flange thickness; 1'-4" for the web thickness; 1'-0" for the bottom flange thickness. Labels include: 'Shear Connector 5 1/2" Spacing', 'No Shear Connectors', 'R-3/4" x 12"', 'R-1/2" x 16" (NTR)', 'R-2 7/8" x 16" (NTR)', 'R-1/2" x 16" (NTR)', 'R-3/4" x 12"', '2-R's 3/4" x 7 1/2"', '1/2" Web R (NTR)', '5/8" Web R (NTR)', '2-R's 1 1/4" x 7 1/2"', '1/2" Web R (NTR)', '2-R's 3/4" x 7 1/2"', 'Brg. N. Abut.', 'Splice 1', 'Pier', 'Splice 2', 'Brg. E. Abut.', '92'-11 1/2"', '92'-6"', '24'-0"', '16'-0"', '16'-0"', '24'-0"', '40'-0"', '40'-0"', '92'-11 1/2"', '92'-6"', '265'-0"'.

Camber Diagram is based on Concrete and Steel D.L. Deflection and Vertical Curve Adjustment.

	G1	G2	G3	G4	G5	G6	G7	G8	G9
Brig. W. Abutment	751.33	751.50	751.64	751.78	751.92	751.83	751.73	751.64	751.51
Splice 1	750.73	750.92	751.08	751.24	751.40	751.34	751.26	751.19	751.09
Pier	750.26	750.46	750.64	750.81	750.98	750.92	750.86	750.79	750.75
Splice 2	749.96	750.17	750.36	750.54	750.72	750.67	750.62	750.56	750.48
Brig. E. Abutment	748.79	749.03	749.23	749.44	749.64	749.61	749.58	749.55	749.49

	W. Abut.	Pier	E. Abut.
R ₁₂ (k)	62.5	233.6	62.5
R ₄ (k)	45.5	88.0	45.5
Imp. (k)	8.8	17.8	8.8
R total (k)	116.8	339.4	116.8

	.4 Span 2	Pier
Is (in ⁴)	35,739	102,238
Is (in ⁴)	92,040	—
Sc (in ³)	1,427	3,110
Sc (in ³)	1,959	—
Q (k/l')	1.025	1.025
MQ ('k)	1,008	2,878
fsQ (k.s)	83	111
sQ (k/l')	.330	.330
MSQ ('k)	408	719
M ₄ ('k)	1,130	4,218
M IMP ('k)	226	240
Total ('k)	1,764	2,177
fs(SQ+kt) (k.s)	109	83
fs total (k.s)	194	194
V.R (K)	580	—

DESIGNED BY T.I.
DRAWN BY K.P.
CHECKED BY A.T.

SHEAR CONNECTOR DETAIL

No Req'd = 3,294

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL STEEL RELOCATED TR.—349 OVER F.A. ROUTE 407 STATION 45 + 70.98 F.A. RT. 407 ADAMS COUNTY SECTION I—6HB			SHEET 9 of 19
CHRISTIAN-ROGE AND ASSOC. ENGINEERS CHICAGO, ILLINOIS			

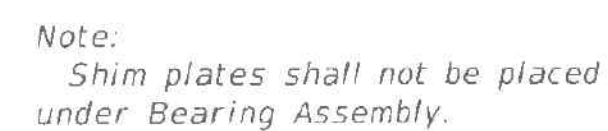
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	20
		CONTRACT NO. 72E90		
	JULIUS ROSS	FEED AID PROJECT		

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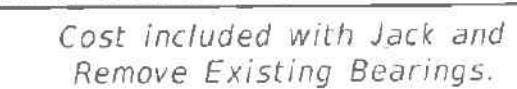
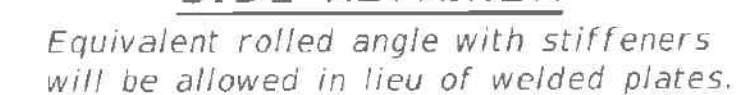


$R\phi$	(K)	62.5
R_L	(K)	45.5
$Imp.$	(K)	8.8
R (Total)	(K)	116.8

Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



East Abutment	
Location	Thickness "t"
G5	$\frac{3}{4}$ "
G6	$\frac{3}{8}$ "
G8	$\frac{3}{4}$ "



Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	3480
Anchor Bolts, 1"Ø	Each	36

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1604	(1-6) BRR	ADAMS	6	6
		CONTRACT NO. 72M88		
ILLINOIS		FED. AID PROJECT		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	D6 BP 2027	ADAMS	22	22
		CONTRACT NO. 72E90		
		ILLINOIS	FED. AID PROJECT	

MODEL: bridge-18 [Sheet]
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